

Preparation of the Slovak U20 Team for the World Junior Championship

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<p>This thesis is project-based. The objectives of it give an insight into the preparation of the Slovak national U20 team for the World Junior Championship 2020 in the Czech Republic. The thesis covers the process of preparing the team in the pre-season, in-season and describes the performance at the World junior championship. The thesis consists of a theoretical section, main objectives and stages of the project, and final discussion.</p> <p>The theoretical section describes Slovak hockey and national teams, role of the coach in player's development, his skills and philosophy according to the available literature. In the following sections, the focus is on players in terms of their profiling, goal setting, monitoring and team cohesiveness.</p> <p>In the main part of the thesis, the focus is on the project objectives. The objectives are divided into four basic points and gradually build on each other. The work describes how important is to create a cohesive team and apply an athlete-centered approach, focusing on players as individuals. Furthermore, it is the team's tactical preparation and the effort to reach the potential of each player towards team success.</p> <p>In stages of the project, the focus is on profiling players and setting team and individual goals for the season. In the following stages, the author describes the preparing of the team during training camps, tournaments and exhibition games before the very peak of the season, which was the performance of the Slovak U20 national team at the World Junior Ice Hockey Championships.</p> <p>This project started in June 2019 and ended in January 2020. It was made for Slovak national coaches to improve their work of preparing players at the national level.</p>	
Keywords Profiling athletes, goal setting, group cohesion, ice hockey, athlete-centred coaching	

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1 Introduction

This thesis is aimed at describing the process of preparation Slovakian U20 national hockey team for the World Junior Championship 2020 in the Czech Republic.

On June 7, 2019, the president and general manager of SZLH (Slovak Ice Hockey Federation) appointed the head coach of the national U20 team, his two assistants and the goalkeeper coach. I was appointed as the assistant coach.

My core job description was to cover defensive tasks of the team, developing young defensemen, team preparation for penalty killing play and analysis of the defensive tasks/system before and after games, individual approach to particular players and mutual feedback. Overall preparation for the World Junior Championship, which took place at the turn of the 2019/2020 season in the Czech towns of Trinec and Ostrava, took as few as 29 weeks. It is really a short period for dedicated specific preparation and development for such an important tournament, considering that we did not have all the players available during this period. Another very important factor is the fact that players compete in different categories and leagues around the world. These players undergo different training processes at the club level and sustain different game loads in matches in different competitions. All these factors make it difficult for coaches to work in the national team, mainly when planning the overall preparation and implementation of its individual parts. An equally difficult task was to compile the final nomination for the World championships.

After the coaches were appointed, their task was to gather the team staff according to their requirements and elaborate a plan for the season. The first important person of the team staff to be appointed was the Junior National Team Manager who was in charge of all organizational activities, followed by a conditioning coach whose task was to prepare players off the ice. An equally much needed and indispensable position to be appointed was a video analyst and, of course, two trainers and one team physician. Before the final stage of the training process for the World Junior Championships the team staff was completed with a team consultant and PR manager. The total number of members of the team staff in the final tournament was twelve.

The theoretical section of the thesis focuses on facts concerning Slovak ice hockey, especially the role of the Slovak Ice Hockey Association, number of Slovak active players and how the competitions in Slovak leagues work. I included the statistics of the national teams in the modern history and an overview of their positions during the individual championships. Furthermore, I described the role of a coach according to the available litera-

ture, the approach he should take in regard to players, his personal growth and philosophy. In the following sections, I focus on players in terms of their profiling, goal setting, monitoring, and group cohesiveness.

In the main part of my thesis, I focused on the project objectives. The aims are divided into four basic points and gradually build on each other. I describe how important it is to create a cohesive team and apply an athlete-centered approach, focusing on players as individuals. Furthermore, it is the team's tactical preparation and the effort to reach the potential of each player towards team success.

In the following stages of the project, I focus on profiling players and setting team and individual goals for the season. The last parts are the stages of preparing the team during training camps, tournaments and exhibition games before the very peak of the season, which was the performance of our national team at the World Junior Ice Hockey Championships.

2 Ice Hockey

Ice Hockey, also termed as the fastest physical game on the planet, is mostly played in Canada, North America and Europe by modifying a sport called Hurley. However, it is believed to have originated in the East Coast, Nova Scotia, in the early 18th century and then has mainly influenced the West as a winter sport (Fischler and Fischler, 2019).

Ice Hockey is a game played on an ice-coated surface with skates on the feet, played in between two teams with sticks to hit the puck and score goals against the other team. This game has gained incredible acceptance from the people and is also being played at an international level at the Olympics since 1920's. The primary objective of Ice Hockey is to shoot a puck through the ice-coated playing surface known as rink and strike it into the opponent's goalpost with a hockey stick. A team with six players including the goaltender, scores a point by hitting the puck in to the goalpost. The team scoring more number of goals at the end of the game is the winner. During the game, the puck is passed from player to player on the rink and the opponent team tries to prevent passing of the puck and the opponent goaltender blocks at the goalposts from hitting the goals. Ice hockey game is typically timed for 1 hour with three 20-minute period intervals. The game clock keeps ticking only if the puck is being played by the players on the rink. If there is any halt in the play, the game clock is stopped immediately. The attacking and defending teams change ends of the rink after second and third period intervals and also at the start of overtime (Tutorialspoint.com, 2020).

2.1 SZLH

The Slovak Ice Hockey Association (SZLH) is a civic association, with its registered office at Trnavská cesta 27/B, 831 04 Bratislava 3. SZLH is a legal entity that associates clubs, athletes, sports professionals and other members in order to support and fulfill the objectives of its activities, while performing its activities in accordance with the Constitution of the Slovak Republic and other generally binding legal regulations of the Slovak Republic. SZLH also associates regional ice hockey sports associations in the form of civic associations, which are registered in the registers of civic associations of the Slovak Republic, or other interest associations of natural or legal persons related to activities in ice hockey. SZLH is a member of IIHF and Slovak Olympic Committee represented by its own symbolism, SZLH logo and SZLH flag (Hockeyslovakia, n.d.).

2.1.1 Clubs and Leagues in Slovakia

The list of all the active clubs in the Slovak Republic in the 2019-20 season consists of 115 clubs plus 6 foreign clubs (3 HUN, 1 POL, 2 AUT) that participate in various age category competitions (HockeySlovakia.sk - Official web of slovak hockey, n.d.).

SZHL statistical data (as of June 21, 2019)

- Number of registered players: 10 910
- Of which adult players: 2091
- Of which young players (up to 20 y.) 8819
- Number of female hockey players (all categories) 484
- Number of referees including regional: 374 (of which 14 female)
- Number of covered ice rinks 71
- Number of open ice rinks 28

SZLH organised competitions in 2019-20 season

- The TIPSPORT Senior League
- 1st Senior League SLOVENSKÁ HOKEJOVÁ LIGA
- 2nd Senior League
- Women Extraleague
- Junior Extraleague (U20)
- 1st Junior League (U20)
- Youth Extraleague (U18) Kaufland Extraleague
- 1st Youth League (U18) K-Classic 1st League
- League of Kadets (U16)
- School leagues (1st Older boys league under 15, 1st Younger boys league under 13)
- Squirt and Novice Tournaments

The Senior League is the highest professional ice hockey senior competition organized by SZLH through the League Council, which is the governing body of the competition. The media name of the contest is TIPSPORTLIGA. It was founded in 1993 after the establishment of independent Slovakia. The number of participants in the competition in the 2019-20 season is 13, two of which are from Hungary. HC Košice and HC Slovan Bratislava are the most successful teams of the highest Slovak hockey league, both with 8 titles. HK Dukla Trenčín a HC 05 iClinic Banská Bystrica are both three-time champions (Tip-sportliga, n.d.).

The 1st Senior League is the second highest professional competition of seniors in ice hockey organized in the territory of the Slovak Republic. The media name of the competition is SLOVAK HOCKEY LEAGUE. The governing body of the competition is the SZLH

through the League Board of the Senior League, which has three members. In the 2019-20 season, the number of participants in the competition is 10, plus the Slovak national team U18 (HockeySlovakia.sk - Official web of slovak hockey, n.d.).

The Junior Extraleague is the highest junior ice hockey competition organized in the Slovak Republic. The media name of the competition is Junior Extraliga. The governing body of the competition is SZLH. In the 2019-20 season the number of participants in this competition is 11, including the Slovak national team under 18 years. The 1st Junior League is the second highest junior ice hockey competition organized in the Slovak Republic. The media name of the competition is the 1st League of Juniors. The number of participants in this competition in the 2019-20 season is eight (HockeySlovakia.sk - Official web of slovak hockey, n.d.).

2.1.2 National teams

Team A

The Slovak national hockey team belongs to the elite top division of the World Championships. It was founded in 1993 after the break-up of Czechoslovakia from the former Czechoslovak national hockey team. The IIHF Directorate has designated the Czech team as the successor of the Czechoslovak national team in the A World Championship category. The Slovak national team was therefore included in the C1 World Championship group. In the following years, as shown in Figure 1, the Slovak team gradually advanced to the elite A category where it has continuously competed since 1996. In 2017, Craig Ramsey was named its head coach. The greatest achievements of the national ice-hockey team are the gold, two silver and one bronze medal and the fourth place at the 2010 Winter Olympics in Vancouver, Canada (Wikipedia Contributors, 2020).

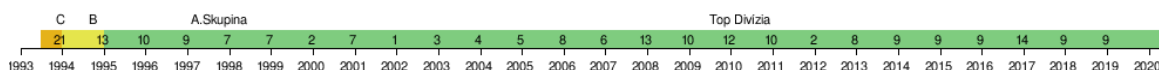


Figure 1. Participation in the A-Category World Championship

Team U20 – team

The Slovak national hockey team under 20 years is a national team that represents Slovakia at the U20 Ice Hockey World Championship. It was founded in 1993 after the break-up of Czechoslovakia from the former Czech-Slovak hockey team. The IIHF Directorate has designated the Czech team as the successor of the Czechoslovak national team in

the A World Championship category. The Slovak junior national team was therefore included in the C1 World Championship group. In the following years, the Slovak junior national team gradually advanced to the elite A category where it has continuously competed since 1996 (Wikipedia, 2020).

Project „SR U20“ as a part of the Senior League (Extraliga)

In the 2007-08 season, the project “SR U20 in Extraliga” was launched. The Slovak national hockey team of players under 20 competed with the teams in the Slovnaft Extraliga. Although the team occupied the last place most of the time, it could not be relegated from the Extraliga as it was guaranteed immunity. Even though they run the last, the players had a chance to gain irreplaceable experience and playfulness, which they used at the 2009 U20 World Championships where the team took a great 4th place. This project under the name HK Orange 20 actively participated in the Extraliga until the 2019-20 season (Wikipedia, 2020).

2.2 IIHF

The IIHF (International Ice Hockey Federation), founded on May 15, 1908 in Paris, France, is the governing body of international ice hockey. The IIHF features 81 member associations, each of which is the national governing body of the sport in its nation. Besides controlling the international rulebook, processing international player transfers, and dictating officiating guidelines, the IIHF runs numerous development programs designed to bring hockey to a broader population. The IIHF also presides over ice hockey at the Olympic Games, and over the IIHF World Championships at all levels, men, women, juniors under-20, juniors under-18 and women under-18. Each season, IIHF in collaboration with its local organising committees, runs around 25 different World Championships in five different categories. Besides the world championships, the IIHF also runs a set of European club competitions. In 2008, the IIHF was celebrating its 100-year anniversary, honoring it with a host of ambitious new projects, including naming the Century All Star Team, the 100 Top Stories of the Century, charity events, children's development programmes, and the launch of the Victoria Cup (IIHF International Ice Hockey Federation, n.d.).

2.3 World Junior Championship in Ice Hockey

The IIHF Ice Hockey World Junior Championships (WJC), commonly known simply as the World Juniors, are an annual event organized by the International Ice Hockey Federation (IIHF) for national under-20 ice hockey teams from around the world. They are traditionally held in late December, ending in early January. The tournament usually attracts top hockey players in this age category. However, some NHL teams do not release their

top players as the tournament overlaps with the NHL season. The main tournament features the top ten ranked hockey nations in the world, comprising the 'Top Division', from which a world champion is crowned. There are also three lower pools—Divisions I, II and III—that each play separate tournaments playing for the right to be promoted to a higher pool, or face relegation to a lower pool. Player Eligibility: The players participating in any IIHF Ice Hockey U20 World Championship must be eligible to compete as a male athlete of the male gender and be no younger than fifteen years of age, and no older than twenty years of age, on December 31 of the year in which the Championship Season ends. No under-age waiver is permitted. Maximum Number of Players, Officials: The maximum number of participants per team in the IIHF Ice Hockey U20 World Championships in each Division shall be as follows:

- (i) Top Tournament: twenty (20) players, three (3) goalkeepers and six (6) team officials.
- (ii) Divisions I and II: twenty (20) players, two (2) goalkeepers and six (6) team officials.
- (iii) Division III and lower Divisions: eighteen (18) players, two (2) goalkeepers and six (6) team officials (IIHF International Ice Hockey Federation, n.d.).

2.3.1 History

The first official tournament was held in 1977, although the first three tournaments from 1974 to 1976 were held unofficially. The tournament has been dominated by the teams from Soviet Union/CIS/Russia and Canada, together accounting for 31 of the 44 overall gold medals awarded (through 2020). The USSR won the first four official tournaments, while the Canadians put together five straight championships between 1993 and 1997, and another five straight from 2005 to 2009. Canada leads the all-time gold medal count with 18 golds, while the Soviet Union, the CIS and Russia combined have 13 golds.

When it began, the World Junior Championship was a relatively obscure tournament. It has since grown in prestige, particularly in Canada, where the tournament ranks as one of the most important events on the sports calendar and during the holiday season.

The tournament offers one of the most prestigious stages for young hockey players, able to significantly boost a player's value for upcoming NHL Entry Drafts. Canada, Finland and Sweden have participated in all 44 IIHF Ice Hockey World Junior Championships as well as the three unofficial World Junior Championships. USSR/CIS/Russia (when the Soviet Union broke up, Russia remained in Pool A, while all other former Soviet republics started competing in Pool C in 1993) and Czechoslovakia/Czech Republic have also participated in all official and unofficial World Junior Championships, and the United States has participated in all except the unofficial tournament in 1976 (Wikipedia, 2020).

When Czechoslovakia peacefully split in 1993, the Czech Republic remained in Pool A but Slovakia (Slovak Republic) was placed in Pool C (now Division II). Slovakia was promoted

to the top division for the 1996 Championships and has remained there since. Starting with the 1996 tournament, the competition was increased from an 8-team round-robin to the current 10-team format, including elimination rounds. Since then, Switzerland has become a regular participant (Wikipedia, 2020).

2.3.2 Tournament Information and Venues

2020 IIHF World Junior Championships was held for the first time together in Ostrava and Trinec. Tournament days were December 26, 2019 – January 5, 2020. Preliminary rounds were played in both cities. The top four teams in each preliminary round advanced to the quarterfinals. Quarterfinals were played across the groups. Semifinal and final games were played in Ostrava. The teams that finished last (5th) in each group played the Relegation round (best of 3) (IIHF International Ice Hockey Federation, n.d.).

Venues:

Ostrava – Ostravar Arena. The capacity is 10,500 spectators for hockey.






Trinec – Werk Arena. Seating capacity is 5,400 spectators.

2.3.3 Competing Teams and Groups

2020 IIHF World Championship seeding from 2019 IIHF WM20:

1 Finland, 2 USA, 3 Russia, 4 Switzerland, 5 Sweden, 6 Canada, 7 Czech Republic, 8 Slovakia, 9 Kazakhstan, 10 Germany











Table 1. Groups of 2020 WJCH

TRINEC		OSTRAVA	
Group A		Group B	
 Finland		 USA	
 Switzerland		 Russia	
 Sweden		 Canada	
 Slovakia		 Czech Republic	
 Kazakhstan		 Germany	

2.3.4 Games and Practice schedules

Teams had 30 minutes on-ice practice period on game days. On non-game days the on-ice practice period was 75 minutes. For the quality of ice most practices were held in the practice arenas except the morning pregame practices and Play-off round.

Table 2. Tournamnet schedule

TRINEC					
GROUP A	FIN	SUI	SWE	SVK	KAZ
OSTRAVA					
GROUP B	USA	RUS	CAN	CZE	GER

PRELIMINARY ROUND

DAY	DATE	GROUP	TIME	VENUE	GAME NO.	HOME & GUEST TEAM
1	THURSDAY, 26.12.19	A	15:00	TRINEC	1	(4) SUI - (9) KAZ
		B	15:00	OSTRAVA	2	(7) CZE - (3) RUS
		A	19:00	TRINEC	3	(5) SWE - (1) FIN
		B	19:00	OSTRAVA	4	(6) CAN - (2) USA
2	FRIDAY, 27.12.19	A	15:00	TRINEC	5	(8) SVK - (9) KAZ
		B	15:00	OSTRAVA	6	(10) GER - (2) USA
3	SATURDAY, 28.12.19	A	15:00	TRINEC	7	(1) FIN - (8) SVK
		B	15:00	OSTRAVA	8	(7) CZE - (10) GER
		A	19:00	TRINEC	9	(4) SUI - (5) SWE
		B	19:00	OSTRAVA	10	(3) RUS - (6) CAN
4	SUNDAY, 29.12.19	A	15:00	TRINEC	11	(9) KAZ - (1) FIN
		B	19:00	OSTRAVA	12	(2) USA - (3) RUS
5	MONDAY, 30.12.19	A	15:00	TRINEC	13	(9) KAZ - (5) SWE
		B	15:00	OSTRAVA	14	(10) GER - (6) CAN
		A	19:00	TRINEC	15	(8) SVK - (4) SUI
		B	19:00	OSTRAVA	16	(2) USA - (7) CZE
6	TUESDAY, 31.12.19	A	15:00	TRINEC	17	(5) SWE - (8) SVK
		B	15:00	OSTRAVA	18	(3) RUS - (10) GER
		A	19:00	TRINEC	19	(1) FIN - (4) SUI
		B	19:00	OSTRAVA	20	(6) CAN - (7) CZE
7	WEDNESDAY, 31.12.19	DAY OFF				

QUARTER - FINAL

DAY	DATE	GROUP	TIME	VENUE	GAME NO.	HOME & GUEST TEAM
8	THURSDAY, 02.01.20	RELEG.1	10:00	OSTRAVA	21	5A vs 5B*
		QF 1	12:30	TRINEC	22	QF 1
		QF 2	15:00	OSTRAVA	23	QF 2
		QF 3	17:30	TRINEC	24	QF 3
		QF 4	20:00	OSTRAVA	25	QF 4

Note: if qualified, CZE to play the late QF game in Ostrava

Note: QF match-ups to be (2B-3A), (2A-3B), (1B-4A), (1A-4B)

Note: Best 2 of 3 Relegation Round Home & Visitors alternated with higher ranked 5th place team to start home

9	FRIDAY, 03.01.20	DAY OFF
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SEMI-FINAL ROUND

DAY	DATE	GROUP	TIME	VENUE	GAME NO.	HOME & GUEST TEAM
10	SATURDAY, 04.01.20	RELEG.2	11:00	OSTRAVA	26	5A vs 5B*
		SF 1	15:00	OSTRAVA	27	SF 1
		SF 2	19:00	OSTRAVA	28	SF 2

Note: If qualified, CZE to play the early SF game

Note: SF match-up according to the 2020 IIHF Sport Regulations

MEDAL ROUND

DAY	DATE	GROUP	TIME	VENUE	GAME NO.	HOME & GUEST TEAM
11	SUNDAY, 05.01.20	RELEG.3	11:00	OSTRAVA	29*	5A vs 5B* IF REQUIRED
		BRONZE	15:00	OSTRAVA	30*	L(G27) – L(G28)
		GOLD	19:00	OSTRAVA	31*	W(G27) – W(G28)

*numbers according to the Relegation round (Hockeycanada.ca, 2020).

3 Athlete – Centered Coaching

An athlete-centered coaching approach is defined by a style of coaching that promotes athlete learning through athlete ownership, responsibility, initiative and awareness, guided by the coach. Ownership and responsibility encourage athlete accountability for his or her performance on and off the field. The coach asking questions in preference to being directive or commanding marks the athlete-centred coaching style (Kidman and Davis, 2006).

Asking questions puts the onus of knowledge formation and construction on the athlete instead of placing the athlete in the role of replicator of the coach's directions and movement models, as is commonly the positioning of the athlete in a more directive approach to coaching. "In an athlete centered environment, the athlete owns the direction, is accountable for that direction and this takes responsibility for their actions and performance" (Penney and Kidman, 2014, pp. 2-3). In an athlete centred coaching environment, athletes are encouraged to participate in decision-making and problem solving in a shared approach to knowledge and its transmission (Pill, 2018).

The contrast to an athlete-centered coach is the coach-centered or autocratic coach (Ahlberg, Mallet, and Tinning, 2008). This style of coaching is characterised as directive commanding and prescriptive coaching, emphasising conformity and transmission of information for reproduction. The athlete is positioned as reliant on the coach to facilitate performance, particularly their competitive performance. A coach-centered approach operates in order to control players and, as such, predominantly acts to disempower athletes (Pill, 2018).

An athlete-centered approach is underpinned by a philosophy of empowerment. This empowerment is built on the provision of age and developmentally appropriate autonomy for players to make decisions, develop intrinsic motivation to improve and perform and develop goals and solutions to enhance their performance on the field and behaviour off the field. An athlete-centered approach is, however, a social process embedded in a range of complex power relations. It is not simply a choice for a coach to make, regardless of his or her coaching context (Pill, 2018).

3.1 Self-Determination Theory

Self-Determination Theory, or SDT, links personality, human motivation, and optimal functioning. It posits that there are two main types of motivation—intrinsic and extrinsic—and

that both are powerful forces in shaping who we are and how we behave (Deci & Ryan, 2008).

Extrinsic motivation occurs when we are motivated to perform a behavior or engage in an activity to earn a reward or avoid punishment (Tranquillo and Stecker, 2016). In this case, you engage in behavior not because you enjoy it or because you find it satisfying, but in order to get something in return or avoid something unpleasant. Intrinsic motivation involves engaging in a behavior because it is personally rewarding; essentially, performing an activity for its own sake rather than the desire for some external reward. Essentially, the behavior itself is its own reward (Di Domenico and Ryan, 2017).

Self-determination theory suggests that people are motivated to grow and change by three innate and universal psychological needs. This theory suggests that people are able to become self-determined when their needs for competence, connection, and autonomy are fulfilled. According to the self-determination theory, people need to feel the following in order to achieve psychological growth:

- **Competence:** People need to gain mastery of tasks and learn different skills. When people feel that they have the skills needed for success, they are more likely to take actions that will help them achieve their goals.
- **Connection or Relatedness:** People need to experience a sense of belonging and attachment to other people.
- **Autonomy:** People need to feel in control of their own behaviors and goals. This sense of being able to take direct action that will result in real change plays a major part in helping people feel self-determined (Cherry, 2013).

In competitive settings such as sports and athletics, fostering a sense of self-determination can inspire people to excel.

- Athletes who feel that they are capable of achieving their goals and overcoming challenges are often driven to perform better.
- Excelling allows people to gain an important sense of competence and build mastery in skills that are enjoyable and important to them (Cherry, 2013).

Researchers have also found that people who have an internal sense of control are also more likely to stick to a regular exercise regimen (Hagger and Chatzisarantis, 2008).

3.2 Feedback

Feedback and communication in general are critical components to coaching. Feedback allows coaches to tell athletes how they are performing in relation to their expectations. Coaches can then instruct and teach their athletes how to reach these expectations and perform better (Hillman, Schwandt and Bartz, 1990).

Augmented feedback is information provided to the learner from an external source. It is the general term used to describe information given about the performance of a skill that enhances (or adds to) the intrinsic feedback that is naturally available from the performer's senses (i.e. his or her auditory, proprioceptive and visual systems). Augmented feedback can be provided verbally or non-verbally, during (concurrent feedback), immediately following (terminal feedback), or within some period after the completed skill (delayed feedback). It can provide information about the movement outcome (knowledge of results [KR]) and/or the movement pattern (knowledge of performance [KP]) (Jones and Kingston 2013).

3.3 Group cohesiveness

Generally speaking, cohesion represents the strength of the bonds among group members or, more informally, the degree to which individuals stick together (Carron and Eys, 2012).

In sport and exercise research, the most accepted definition of cohesion was provided by Carron, Brawley, and Widmeyer (1998): "a dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs" (p. 213). This definition implies several characteristics of cohesion that include an ability to change over the span of group development (i.e., dynamic), a focus on both tasks (i.e., instrumental objectives) and social aspects of the group (i.e., member affective needs), and, relatedly, an assumption that it is multidimensional.

Research within cohesion has integrated a broad range of topics which suggests that there are a number of factors which it is influenced by and these all must coincide for the greatest results. There can be negatives to high cohesion especially within the social aspect, as team members could become too involved and lose focus of the team and there is also more likely to be clashes between members. However, high social cohesion can also be a positive as those individuals are more likely to enjoy sport and therefore extend length of participation. There must be defined and specific goals to avoid confusion and promote the best cohesion and undoubtedly this should enhance success and high level

performance from all players. This is fundamental for psychologists, coaches and players alike to understand in order to promote the best team environment and team building interventions are a thriving method of improving cohesiveness. Therefore, all aspects of cohesion must be balanced and positive within a sports team both at an individual and group level in order to have the highest level of performance and success (Believe Perform - The UK's leading Sports Psychology Website, 2017).

3.4 Profiling

Originally developed by Butler (1989) with the Great Britain Olympic boxing team, performance profiling is an assessment tool primarily used by sport psychologists to enhance athlete awareness (Butler, 1989, 1997; Butler and Hardy, 1992; Butler, Smith, and Irwing, 1993). Through an understanding of selected principles of personal construct theory (Kelly, 1955), Butler and Hardy (1992) developed a client-centered performance assessment technique that asks athletes (either individually or as part of a group) to identify the qualities essential to their performance and then rate themselves on those qualities. The completed profile provides the athlete, the coach, and psychologist with a visual representation of the athlete's perception of his or her performance and hence can be used as a basis to set goals and structure training interventions (Butler et al., 1993).

Central to the justification for the development of the profiling technique was the important motivational properties of its use. Drawing on Deci and Ryan's (1985) cognitive evaluation theory (CET), Butler and Hardy (1992) proposed that the profile's athlete-centered approach to performance assessment would facilitate greater intrinsic motivation in athletes. CET asserts that social and environmental factors that reinforce an individual's perception of autonomy, competence, and relatedness will facilitate higher levels of self-determined motivation, which in turn will bring about more positive behavioural, cognitive, and affective outcomes.

Examination of the performance profiling procedure suggests that it may be used in improving athletes' intrinsic motivation via the three key motivational mediators. First, the athlete's perceived autonomy may be positively influenced by the profiling procedure's emphasis on athlete involvement during the performance assessment phase (Butler and Hardy, 1992). Furthermore, when repeated over time, profiling could help reinforce improvements on key performance attributes and thereby improve athletes' perceptions of competence (Butler et al. 1993). Finally, the group nature of the profiling procedure could help to facilitate greater perceptions of relatedness as athletes communicate, interact, and discuss performance-related issues with fellow teammates (Dale and Wrisberg, 1996).

3.5 Goal Setting

Goals are universal in sports. Nearly all athletes set goals on a frequent basis to structure training and motivate performance (Munroe-Chandler, Hall, and Weinberg, 2004; Weinberg, Burton, Yukelson, and Weigand, 2000). Goals provide direction to athletic pursuits that vary in time from immediate (e.g., master a skill, win a competition) to long term (e.g., make the Olympic team in four years). In sports such as golf, tennis, and running, goals form the basis for the continuous process of growth and mastery, which sometimes spans much of one's adult life (Zimmerman and Kitsantas, 2007).

Athletes also attach considerable importance to their goals, and as a result they experience a wide range of emotions in response to goal attainment and failure. Thus, sports provide an ideal context to test the propositions of goal setting theory (Locke and Latham, 1990) and to explore new directions for research on goal effectiveness (cf., Locke and Latham, 2006).

Researchers in sports psychology stress the importance of distinguishing between three types of goals: outcome, performance, and process (Filby et al., 1999; Hardy, 1997). Outcome goals refer to the "end points" of activities, such as results of competition (e.g., winning versus losing; finishing place in a race; making the varsity team). The focus of outcome goals is often a normative comparison, and thus goal attainment depends on the performance of competitors. Performance goals refer to an athlete's personal achievement, such as the number of points scored in a game or finishing time for a 5K race. These goals are often related to personal standards of success; for example, a distance runner may want to improve her time by 15 seconds in a 5k race. Process goals refer to the specific skills, technique, and strategies used to perform satisfactorily (Hardy, 1997).

Locke and Latham (1985) stressed the importance of distinguishing between training and competition when studying the effects of goals. In training, athletes spend considerable time improving their skills, developing strategies, and preparing for competition. Athletes typically pursue goals within specific cycles, reflecting seasons of competition, playoff and championship tournaments, Olympic cycles, and school or professional careers. Within a specific cycle, athletes are likely to set multiple goals and may partition long-term (distal) goals into short-term (proximal) goals. Distal goals represent one's ultimate or ideal level of performance, and typically represent a significant challenge to the actor. Proximal goals are subgoals that serve as stepping stones or building blocks to one's ideal goal (Donovan and Williams, 2003). Proximal goals serve important motivational functions by providing short-term incentives and direction for behavior, boosting self-efficacy, and reducing frustration stemming from failure to meet challenging goals (Bandura, 1986).

The effectiveness of team goals in sports was demonstrated by Anderson, Crowell, Doman, and Howard (1988), who examined the effect of three interventions— individual feedback, team goal setting, and praise— on the rate of legal body checking by members of a university ice hockey team. The three interventions were staggered in an ABCD design (baseline, feedback, goal setting, praise) for two consecutive seasons. The goal setting manipulation involved establishing a team objective for increased checking, followed by individualized goal setting plans for each player on the team. Although group goal setting was introduced after a successful feedback intervention, it had a significant incremental effect on checking behavior in each season. The goal setting intervention used by Anderson et al. (1988) created individual goals that were highly compatible with the team goal. This is consistent with Seijts and Latham's (2000) finding that compatibility between individual and team goals moderated the effects of team goals on team effectiveness.

When individual goals were compatible with team goals, team goal difficulty predicted team success. When individual and team goals were in conflict, team goals were ineffective. Athletes must learn which types of goals, at which point in time, are best suited for their performance. In competition, this could be attention-regulating process goals. In addition, it can be beneficial for athletes to divide their goals into sub-goals and to differentiate between short-, middle- and long-term goals. Fundamentally, goals should be "SMART", that is to say, specific, measurable, attainable, relevant and time based (Bull, Albison and Shambrook, 1996). People often forget that setting goals should also motivate them to develop strategies for achieving these goals. If a golf player sets the goal to reduce his handicap from 12 to 9 in the coming season, he should develop specific strategies as to how he could achieve this, for instance, by improving his putting or playing more strategically. This also shows that the best strategy for reaching one's goals is to concentrate on performance and process goals.

Setting SMART goals. Goals should be...

Specific: Make your goal focussed and well defined.

Measurable: Make completely clear what a success would be.

Attainable: What is within my capability? What do I have to do to make it happen?

Relevant: How much does it matter to me?

Time based: Set a deadline or a date for completion (Orlick and Partington, 1988).

4 Coaching Process

The coach may be involved in a multitude of distinct tasks, but the basic task is to develop and improve the performance of teams and individuals. Traditionally, the coach has to develop a season's plan, improve techniques, skills and tactics for participation/competition, enhance all aspects of mental and physical preparation and manage the individual or team in competitions. In order to do this effectively, the coach must utilise many different types of knowledge in order to solve problems and ultimately make decisions. As competitive success becomes more important, this ability to make fast and appropriate decisions becomes crucial (Nash and Sproule, 2011).

Becoming a great coach is an ongoing process (Cross and Lyle, 1999). Coaches do not just complete a coaching course, coach for a specified period of time and then, presto, become perfect coaches. Coaches' abilities are diverse and complex and each coach is at a different development level (Kidman and Lombardo, 2010).

Nevertheless, every coach can always improve. As we continue to coach, we constantly refine and enhance our coaching skills. It is important to judge the effectiveness of that process rather than any particular outcome. If coaches are not achieving success (however it is defined), they need to look at changing what they are doing, that is, changing the process. Even if coaches believe they are successful, they need to be aware of the process so they can continue to strive for athlete achievement (Hanrahan and Kidman, 2011).

4.1 Purpose and core values

To define a purpose and core values for your team is the 1st step for becoming a successful coach. The next step is to work relentlessly on creating an environment for your athletes that teaches and reinforces the purpose and core values. A coaching purpose defines "*why you coach*". It's your fundamental reason. Core values are the expectations and standards that coaches and athletes use to hold each other and build a culture of excellence. The program core values should be clearly aligned with their coaching purpose. Together, your purpose and core values make up what is sometimes referred to as your core ideology - your enduring character and identity as a coach (Gilbert, 2016).

The Golden Circle explained by Simon Sinek (2009) is a series of three successively larger circles. As figure 2 shows, the first circle represents "Why" you do what you do. The

second embodies “How” you do what you do. The third illustrates “What” you do. The purpose and core values remain fixed, whereas things like people, strategies, markets for example are in constant flux. Collectively, research on the world's greatest companies and most successful sport teams of all time shows how critical it is to identify and nurture your purpose and core values (Gilbert, 2016).

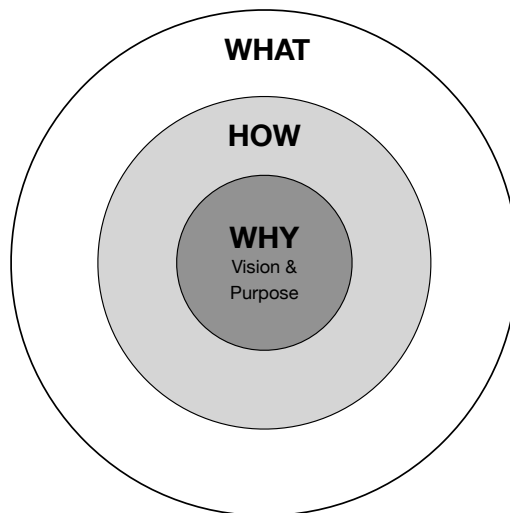


Figure 2. Golden Circle by Simon Sinek

4.2 Connect values to philosophy

“Why” represents coaching purpose and core values. Coaching Philosophy describes “How” you will approach your role as a coach and how you will ensure that you are staying true to your purpose and core values. Your coaching philosophy guides your everyday coaching decisions and action (Gilbert, 2016).

Although your coaching purpose and core values will remain relatively stable across your coaching career, a philosophy might need to be adjusted every season. Your coaching philosophy is best viewed as a flexible set of principles based on your coaching purpose and core values, typically expressed as a list of statements that guide how you will coach (Gilbert, 2016).

Recommend approach to developing your coaching philosophy starts with understanding who you are as a coach and as a person and learning about your athletes. Besides knowing yourself and your athletes you must acquire deep knowledge of your sport (Gilbert, 2016). These three types of knowledge provide the foundation for the integrated definition of coaching effectiveness. It's been defined as the ability to guide athletes and teams to improve in four areas:

- competence as a sport competitor
- self-confidence to meet the demands of sport and life
- ability to build and sustain positive connections with others
- ethical behaviour such as empathy and respect, character.

Knowledge of yourself, your athletes, and your sport - the 3 components of the integrated definition of coaching effectiveness - provides you with the right foundation for developing your coaching philosophy. This approach to developing your coaching philosophy, and the role it plays in your ability to become an effective coach, is identified as one of the keys to successful coaching in International Sport Coaching Framework. It refers to the primary tasks of a sport coach as task-related competence. The six primary tasks of a coach are to:

1. Set vision and strategy.
2. Shape the environment.
3. Build relationships.
4. Conduct practices and prepare for competitions.
5. Read and react to the field.
6. Learn and reflect.

4.3 Coach - player relationship

An essential element of the coach-athlete partnership is the capacity of its members to interact effectively and successfully (Jowett and Poczwardowski, 2007). It can be argued that the level of shared understanding between the coach and the athlete can play a vital role in their interactions. Shared understanding can be defined as coaches and athletes' capacity of accurately perceiving each others' feelings, thoughts, and behaviours.

The 3+1 Cs conceptual model (Jowett 2007) was introduced to capture the quality of the coach– athlete relationship. This model defines the coach– athlete relationship as a situation in which the coach and athlete's feelings, thoughts, and behaviours are interdependent. The constructs of Closeness, Commitment and Complementarity form the first part of the model (i.e. 3Cs). Closeness reflects affective ties such as mutual trust, respect, appreciation, and liking. Commitment reflects their cognitive bond and dedication. Complementarity reflects co-operation and is characterised by mutual responses such as readiness, easiness, and friendliness. The construct of Co-orientation forms the second part of the model (i.e. +1C). Co-orientation attempts to unravel the nature of the interdependence within the relationship. Communication is an essential interpersonal skill and fundamental in the forming and maintenance of any relationship. It is the process by which coaches and athletes actively exchange information (LaVoi, 2007). Rhind and Jowett (2010) have

shown that the type (e.g. dialogue, monologue), volume (e.g. how much), and frequency (e.g. how often) of communication is linked to the quality of the coach– athlete relationship as defined by the 3+1Cs model.

4.4 Roles of the Coach

Sports coaches assist athletes in developing to their full potential. They are responsible for training athletes in a sport by analysing their performances, instructing in relevant skills and by providing encouragement. But you are also responsible for the guidance of the athlete in life and their chosen sport. Consequently, the role of the coach will be many and varied, from teacher, analyst, friend and mentor, disciplinarian, adviser, trainer, motivator, organiser and manager, fundraiser, public relations officer and the Fountain of all Knowledge, see figure 3. In relation to sports, the role of the coach is to create the right conditions for learning to happen and to find ways of motivating the athletes. Most athletes are highly motivated and therefore the task is to maintain that motivation and to generate excitement and enthusiasm. The coach will need to be able to: assist athletes to prepare training programs, communicate effectively with athletes, assist athletes to develop new skills, use evaluation tests to monitor training progress and predict performance (Topend-sports.com, 2010).

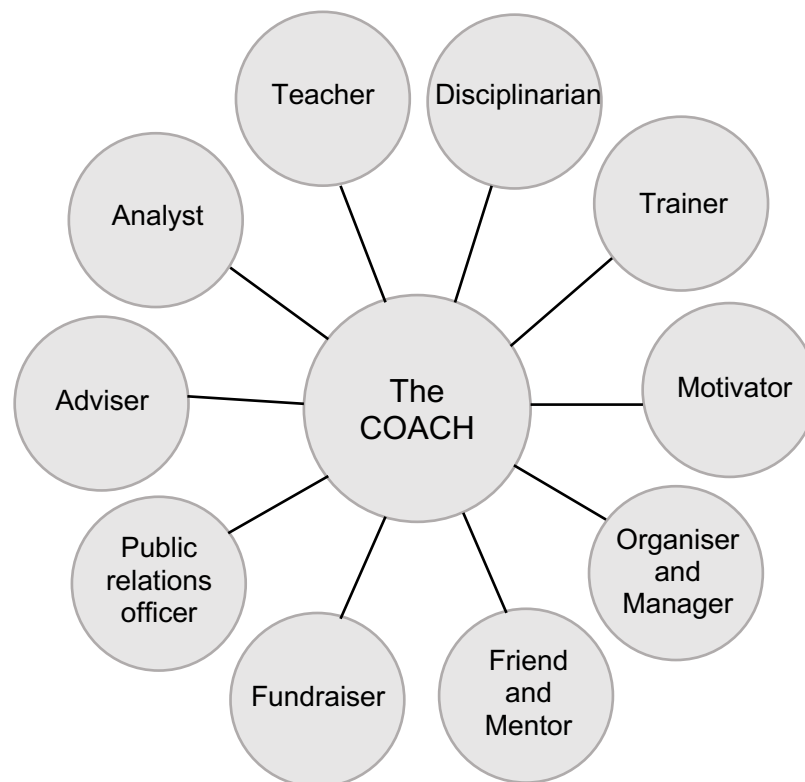


Figure 3. Role of the coach

5 Monitoring Training Loads in Team Sports

Team sports are demanding activities, and when players are challenged to an appropriate level this can lead to physiological adaptations of the aerobic, cardiovascular and muscular systems. These adaptations benefit sporting performance through increased endurance, speed, strength, or power. Excessive amounts of training can however lead to overload of the system's capacity, and increased risk of injury and illness. Otherwise, insufficient training may annihilate the performance benefits. It is thus generally accepted that players should be challenged adequately through appropriate periodization of their activities, allowing optimal recovery between bouts of activity to achieve the desired physiological adaptations of the system (Bompa and Haff, 2009). As figure 4 shows, the activities performed by the athlete represent an external load, yet the abovementioned physiological adaptations come about because of internal load, and this primarily in the form of biochemical stresses (Vanrenterghem et al., 2017).

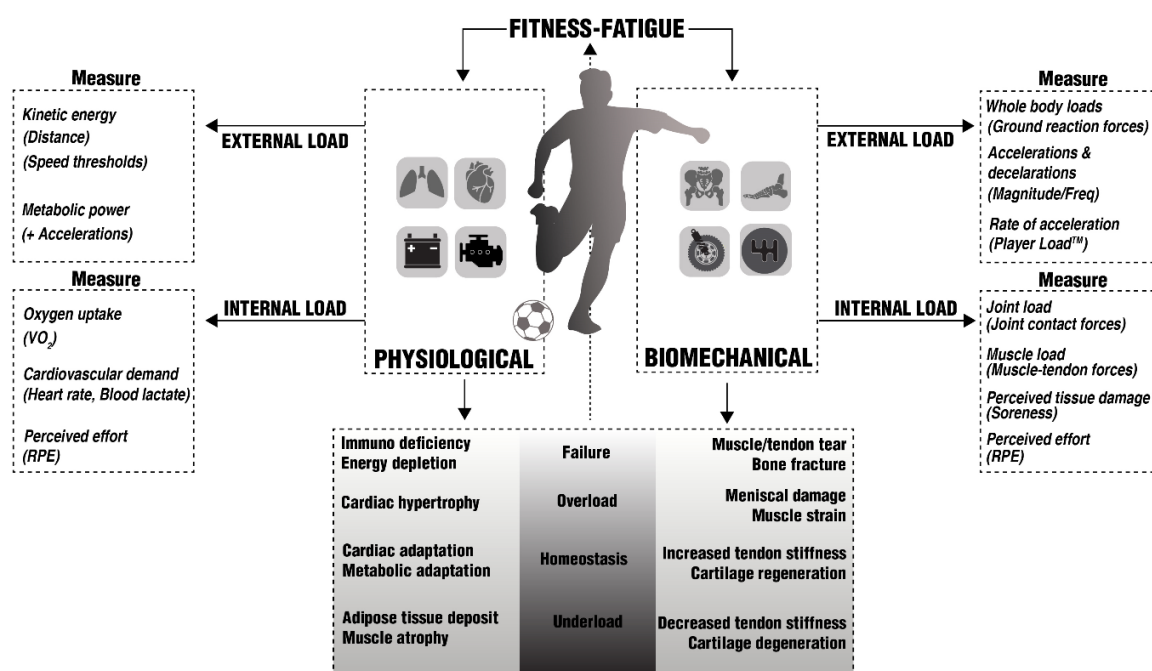


Figure 4. A new player load monitoring framework outlining the cyclical nature in which physiological and biomechanical load leads to adaptation of the biological system as a whole

5.1 RPE

The session-rating of perceived exertion (RPE) model developed by (Foster et al., 1995) is a simple system for strength and conditioning coaches to monitor the load of several different modalities of training (technical, tactical, endurance, speed, and strength). With this system, players are required to provide an RPE for each exercise session that is then multiplied by the training session duration (min) to determine training load. The simplicity

of this system makes it effective for quantifying training load in team sports. The training intensity for each session is calculated using the modified Category Ratio-10 RPE scale described by Foster et al. Players are asked to rate how difficult the entire session is on a scale of 1 to 10 using a modified RPE scale (see Table 3). These measures are taken after approximately 30 min of the completion of training. Researchers have found that athletes of all levels can use the RPE scale reliably once they have been anchored using standard methods (Borg, 1998).

The training volume is quantified using total training time (min). The monitoring of training loads is important for coaches to determine if they are implementing training stress according to their plan (Kelly and Coutts, 2007, Coutts et al., 2003, Foster, 2001, Impellizzeri, Rampinini and Marcora, 2005).

Recent studies have shown that the session-RPE method compares favorably with more complicated and invasive methods for monitoring training loads in athletes (Coutts et al., 2003, Foster et al., 2001, Impellizzeri et al., n.d., Sweet et al., 2004). For example, several studies have shown a significant relationship between session-RPE training load and various heart rate-based methods of monitoring training load in team sports such as basketball (Foster et al., 2001), soccer (Impellizzeri et al., n.d.), and rugby league (Coutts et al., 2003).

Moreover, Sweet et al.(2004) also reported a high agreement between session-RPE and weightlifted (% 1 repetition maximum [1-RM]) during a range of resistance training sessions. Due to the favorable relationships between these methods for quantifying training in various exercises, researchers suggest that the model presented is a simple and inexpensive system that strength and conditioning coaches can use to monitor and guide the training process. Using this method, the session-RPE system is applied in a team-sport setting and training loads are both monitored and predicted in an attempt to better guide in-season training.

Table 3. Borg's Rating of Perceived Exertion (RPE)

1	Nothing
2	Very Easy
3	Easy
4	Comfortable
5	Somewhat Difficult
6	Difficult
7	Hard
8	Very Hard
9	Extremely Hard
10	Maximal/Exhaustion

5.2 Heart Rate Measures

HR measures are used as surrogate markers of the *cardiac* ANS status. As the ANS is interlinked with many physiological systems, HR measures might reflect (aerobic-based) adaptation and fatigue status (Schneider et al., 2018).

However, HR measures are determined by multiple influencing factors, such as environmental (e.g., noise, light, temperature), physiological (e.g., cardiac morphology, plasma volume, autonomic activity), pathological (e.g., cardiovascular disease), psychological (e.g., mood, emotions, stress) conditions, and non-modifiable factors (e.g., age, sex, ethnicity), as well as lifestyle (e.g., fitness, sleep, medication, tobacco, alcohol) and determinants of physical activity (e.g., intensity, duration, modality, economy, body position) (Schneider et al., 2018).

Nevertheless, it is assumed that, in competitive sports, the influence of training plays a predominant role in ANS status changes and, therefore, HR measures might be able to represent the athlete's training status. In team sports, daily morning assessments may prove useful, especially in short- to mid-term periods of increased stress, such as the evaluation of pronounced travel loads or training camps (Fowler et al., 2017; Malone et al., 2017).

Over a wide range of endurance exercise intensities, exercise HR (HR_{ex}) is linearly related to oxygen uptake and energy expenditure during continuous work and is therefore commonly used to monitor and prescribe exercise intensity and training load (Berkelmans et al., 2017).

6 The Objectives of the Project

The main objective of the project describes the aims we wanted to achieve with the national team. As figure 5 shows, the process describes how the team cohesion and athlete centered coaching style succeed. The preparation of the team in terms of tactics and reaching individual's potential in terms of team success were following objectives of the project.

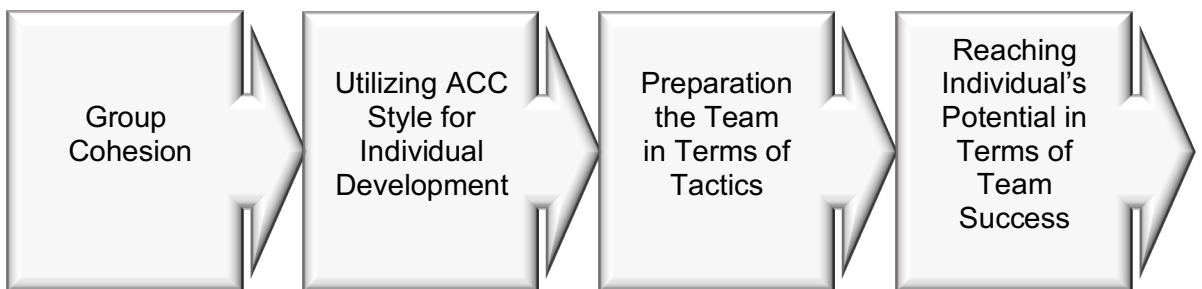


Figure 5. The aims of the project

6.1 Group Cohesion

One of the main aims of this project we wanted to achieve was to create a strong cohesive team which will stick together and remain united. Team dynamics changes as the team's line-ups are changing constantly during the season. Players are trying to earn a spot in the line-up for the final the World Championship. There is a tendency of creating small clashes in the team and mutual rivalry between the players is taking place. One of the main objectives for national coaches was to determine key elements to support and foster team cohesion. As figure 6 shows, those key elements were the mission, good communication, identifying leaders and running team building.

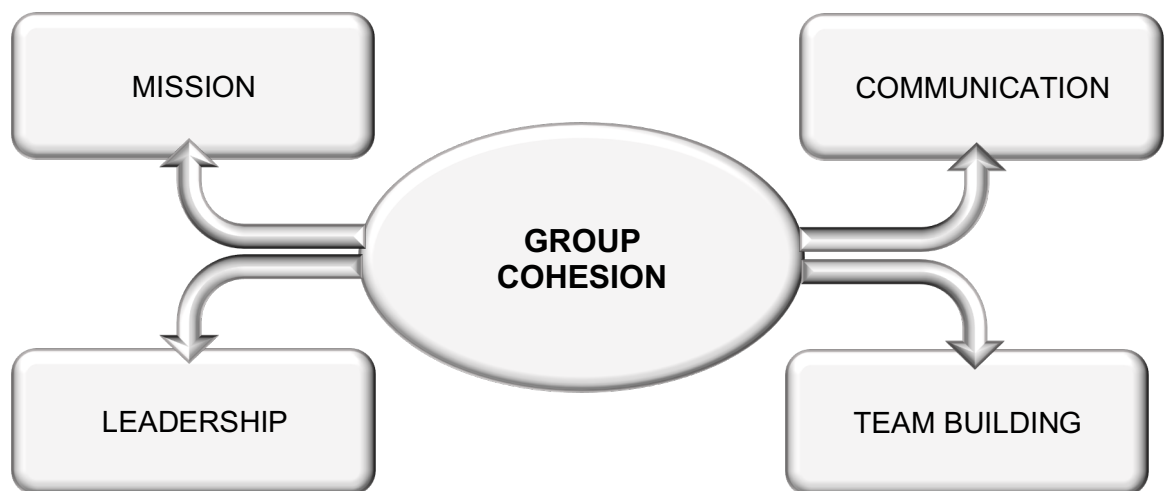


Figure 6. The keys elements of group cohesion of national team

- The Mission

Success in sport is a direct result of dedication and hard work combined with many other things. However, there will be times when you don't have time, don't want to work out or you may completely lose motivation. These are the times when we need a tool to help us persevere and stay dedicated. When it gets tough to keep going, we need that magic tool to help us. That "tool" is a mission statement. A mission statement defines a group's purpose, describes the beliefs in how a group should function, indicating the unique values of a group. Who are we? Where are we going? How are we going to get there? (Taylor and Francis, 2020). Mission statements are similar to vision statements, in that they, too, look at the big picture. However, they are more concrete, and they are definitely more "action-oriented" than vision statements. Your vision statement should inspire people to dream; your mission statement should inspire them to action (Your Bibliography: Ctb.ku.edu. 2020).

There are many ways of developing mission statements. Our goal was to set a meeting with all the players and coaching staff and write down thoughts, opinions and ideas about our common mission in small groups. After gathering all the information, each member of the team had to agree that the statement captures the spirit of what we believe and desire.

- Communication

We wanted cohesive and successful teamwork, so we needed effective communication. Clear communication means setting defined goals, giving direct feedback and reinforcing the key messages. Language is a key part of our coaching, and keeping everything simple and easily understood is a sign of a successful coach. A coach should be able to explain ideas clearly. The communication process involves both sending and receiving information and it can take several forms. Verbal communication is the spoken word, while nonverbal communication contains actions, facial expressions, body positions, and gestures. Communication can occur in one-on-one or in group settings, and in visual formats (e.g., pictures, videos, and observational learning). Communication involves not only the content of a message but also its emotional impact, or the effect the message has on the person receiving it (Burton and Raedeke, 2008).

National team communication strategy consists of:

1. Open door policy
2. One on One communications
3. Communication through team leaders
4. Team Meetings (informational & educational)

5. Easy Sharing Channels (WhatsApp, emails, google drive, mobile phones)

- Leadership

Each group needs some leaders on and off the ice. Our team was not an exception. The team members were changing during the season, so the roles of captain and his assistants had been taken by different players. As we approached the final preparation stage and the team was officially built for competitions at the world championship, the task was how to pick the right leaders. We as coaches could choose captains by ourselves or to give this privilege to the players. We created a sociogram questionnaire made of questions related to both task and social aspects.

The questions in the questionnaire were as follows:

1. Name 3 players of your team who you think are true leaders on and off the ice.
2. Imagine the situation in the game that we are leading by one goal 30s left to the end of the game. We need to defend the score and win the game. Which 5 players and goalie would you put on the ice for this task? Write down 1 goalie, 2 defensemen and 3 forwards.
3. Imagine the situation in the game that we are losing by one goal 30s left to the end of the game. We need to score and put the game into the overtime. Which 6 players would you put on the ice for this task? Write down any players.

The collected answers were shown in the table. According to the results, we were able to analyze the most respected players inside the team and some others who could take a lead as well.

- Team building

A number of researchers have highlighted team building as an important exercise used to enhance the functioning of a group (e.g., Beer, 1980; Martin, Carron, & Burke, 2009). In the sport setting, team building programs have been employed extensively for the improvement of group processes such as cohesion (e.g., Stevens & Bloom, 2003), role understanding (e.g., Prapavessis, Carron, & Spink, 1996), communication (e.g., Newin, Bloom, & Loughhead, 2008), leadership (e.g., Smith & Smoll, 1997), satisfaction (e.g., Carron & Spink, 1993), and performance (e.g., Burton, 1989).

Even though our season was quite short and there were not many opportunities for regular team building activities we tried to implement such an important event for our players. We did two team building events. The first event took place at the beginning of the season in August where most of the players were still in Slovakia. The main goal of this TB was to

have fun and know each other better. The second team building event took place at the final preparation stage in December before the world championship and its main goal was to work on trust, communication, and cooperation. Team building included common team dinners where the whole team went out and spent time together.

Table 4. Team building activities

Date	Team building activities	Objectives of TB activities
August	Indoor laser games, virtual reality, game simulator and fun zone	To have fun, to know each other better
December	Indoor climbing the wall, up to 30 meters	Trust, communication, cooperation

6.2 Utilizing Athlete-Centered Coaching Style for Individual Development

The main goal of national coaches was to create an environment for the players which highlights the athlete-centered coaching style. The players were given the opportunities for self-development, ownership, and personal feedback. As Figure 7 shows, utilizing ACC style includes knowing all the players, individual physical development, one-on-one meetings with the coaches and involving players in creating tactical plays.

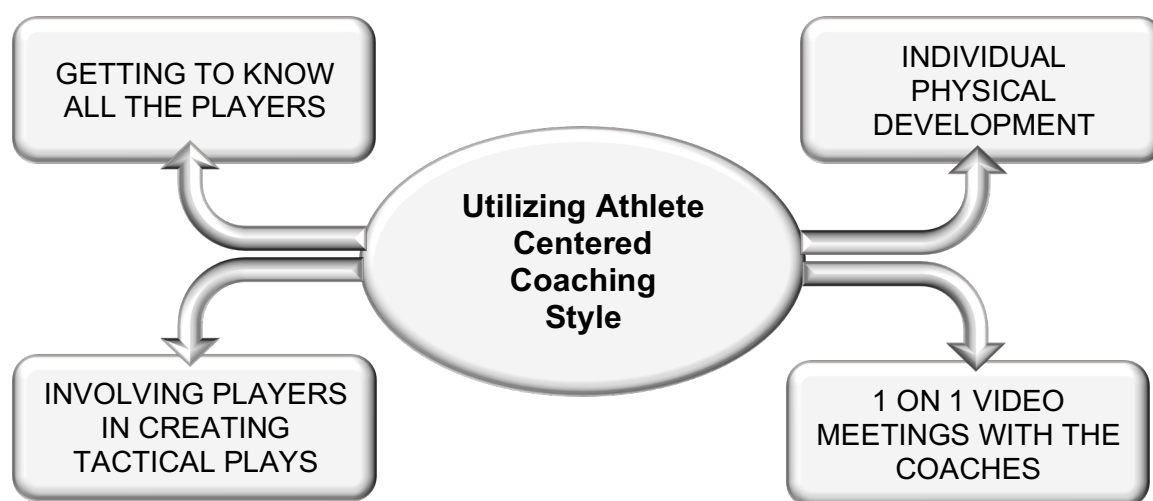


Figure 7. Utilizing ACC style for individual development

- Getting to know all the players

The most important thing at the beginning for us as coaches was to get to know each player. We set individual meetings with every player, set a friendly conversation with them to gather information about their personality, interests, why they want to play for national team, their season goals, how they see their roles in the team and what they are go-

ing to do for it. We wanted to know how would they behave and interact with other teammates in the locker room, who were their best friends and how would they cope with difficult situations if they come up. We asked them questions about their summer preparation because each player had undergone different ways of practicing in the off season. Very important information for us was where the players were going to play during the season and how we would communicate. All collected information about each of the players was uploaded into national team common file in the google drive.

- Individual development in terms of physical preparation

To be a national junior player is a big responsibility and there are huge demands at the World championships in terms of physical preparation. There are going to be many tough games played in a short period of time. To cope with such stress, our players had to be ready and in the best possible shape. However, to prepare the players, whom we do not have under control during the whole season, physically was a big task for us. So we came up with the idea to give the players individual practice exercises on and off the ice which they could implement into their existing practices at the club level. According to their playing time in clubs and practice difficulty, the players could choose from recommendations of exercises we prepared for them. The list which included recommendations, type of exercise, when to execute them (before or after practice or a game), what to focus on and so on, was emailed to players and uploaded to the common google drive. Recommendations for individual development in terms of physical preparation included (see Appendix 1):

- Anaerobic endurance training
- Speed training
- Power - Speed training
- Contrast training
- Training on ice.

- One-on-One video meetings with coaches

Video is a very helpful and educational tool to help our players understand what's required from them. We used video meetings to explain the players things such as team tactics, the system we tried to play and, of course, to correct mistakes players made. We recorded most of the practices and all the games we played. Each of the coaches had his own computer, so we could work more effectively with our players. Individual meetings with players took place before practices or games (to emphasize things we wanted to see) or after (to give immediate feedback and explain what could have been done better). Open door policy gave the players the right to ask for video meetings anytime so coaches were available to show and give the feedback in the locker room, coaches room, meeting rooms at the hotel or hotel room.

- Involving players in creating tactical plays

We tried to give our players the feeling of ownership and creativity, so we let them prepare their plays. Before we started to practice the power play with special team units, we asked the players to write down their power play plan on the blank paper with ice rink on it. It should consist of their power play breakout and the play in the offensive zone. Players were cooperating and discussing in groups of five so we collected four different power play breakouts and offensive zone plays. One player from each group was responsible to present and explain this task to coaches. Players had time from evening till the next morning to prepare and draw it on the paper. Each player from the group had to explain his role in the power play, such as screening the goalie, bumper, point man and so on. At the practices involving special team plays, we as coaches implemented their ideas and practiced them. Besides it, we tried to implement power plays based on our recommendations so the units had more options to choose from and could try what best fits for them.




6.3 Preparation the Team in Terms of Tactics

Tactics generally refer to a player's system of acting, a system of various alternatives of decision-making responses, which allows in a time-bounded concept of a goal to realize player's conduct and team's conduct within the short-term relation (Peráček and Peráčková, 2018).

Tactical preparation is the process of acquiring professional knowledge by players, learning and improving skills that enable the player to choose the optimal solution in each game situation and apply it effectively. Fundamental sign (characteristic) of tactical preparedness is tactical knowledge that is gained in theoretical preparation. In this case, it occurs as an overlapping the content of tactical and theoretical preparation. That is why one part of sport preparation is referred to as theoretical tactical preparation. As far as the relation of this part of preparation to theoretical preparation is concerned, we consider the theoretical preparation as a superior part of this part of preparation. Because theoretical preparation has a wider scope of content than the theoretical tactical preparation (apart from the tactics, the content of it is knowledge about hygiene, diet regime, drinking regime, sleeping regime, and rules). The content of tactical preparation includes activities aimed at developing tactical thinking and tactical acting (Peráček and Peráčková, 2018).

An integral part of teaching tactics and systems was creating the U20 Playbook in the early months. After this, we focused on explaining playing systems during the team educational meetings which took place regularly in training camps and tournaments. All the materials and presentations were printed and uploaded into a common google drive every player had access to.

Table 5. Preparing the team in terms of tactics

Preparing the Team in Terms of Tactics	Period					
	Jun - July	August	September	October	November	December
• Creating The U20 Playbook						
• Teaching tactics and system at the team educational meetings						
• Sharing materials for continuous learning						

6.4 Reaching Individual's Potential in Terms of Team Success

What we as coaches are really trying to do is to search for the principles that will give the team a chance to win and to reach its potential (see Figure 8). That is really what we are trying to do and that is our job as coaches. Our job is to go in, whether either on a practice day or a game day, whether it's a one-on-one meeting, whether it's with an individual or with a group as a whole, our goal needs to be to try to find out what the potential of that identity is. Is it a player, is it a team? If we can find out what they're made of, each one of them and the group as a whole then we are doing our job. Some years you might finish fifth, some years you might even miss the playoffs and some years you might win a championship. But the key measurement is to reach, together with your group, the potential. So how do we get to the potential?

The number one thing is the way you think, and the culture you create. Important is to establish a positive culture in an environment you attend on a daily basis. It means you are always driving towards solutions and better situations. For example, after the loss, we do not throw things around or act violently. It is better to look our challenges in the eye the next day. We are very honest about what we have to do, we realize what happened in the past, we look at what we can learn and we move forward as quickly as possible with those lessons and get the group moving towards something new versus keeping them stuck in the past in a negative way. So a positive process lies behind positive actions, initiating positive actions on a regular basis.

The second most important thing when you're creating positive processes is to understand what it takes to be a team player. What is the sacrifice to be a team player? We need to create an atmosphere where a team player can evolve, where he actually lives on a daily basis. If you feel negative energy in a room, it is because of one single reason, and that's the expectations. When expectations are not clear, transparent and understandable for everybody, you leave the room for negative energy. So, to create a positive team atmosphere, we need to communicate, we need to be good communicators as leaders. We need to invest time to communicate with individuals, with the team what

the expectations are, we need to refresh and revisit them. Whenever the team goes off the page we need to reestablish them. We need to be quick and honest. We can't leave anything unspoken or unaddressed.

Athletes need destinations, a team needs a destination. They need to be challenging and tough destinations, something out of the reach. Athletes naturally want to go for tougher dreams, visions, and goals. We need to establish those, and when players reach them, we have to reboot destinations. Challenging destinations must be realistic, but everybody on the team must buy them.

Values, rules, and regulations are one of the most important things for national team players. Things like discipline, respect, sacrifice, hard work and paying the price. We make sure all those things are really clear before we start to make the actions.

The final thing is to somehow avoid distractions. A world junior championship is an event with a huge attention. Young players are facing a lot of distractions from fans, media, scouts, family members, and many others. They need to get into the moment with high focus. Everything they do, they must do it with concentration and be present.

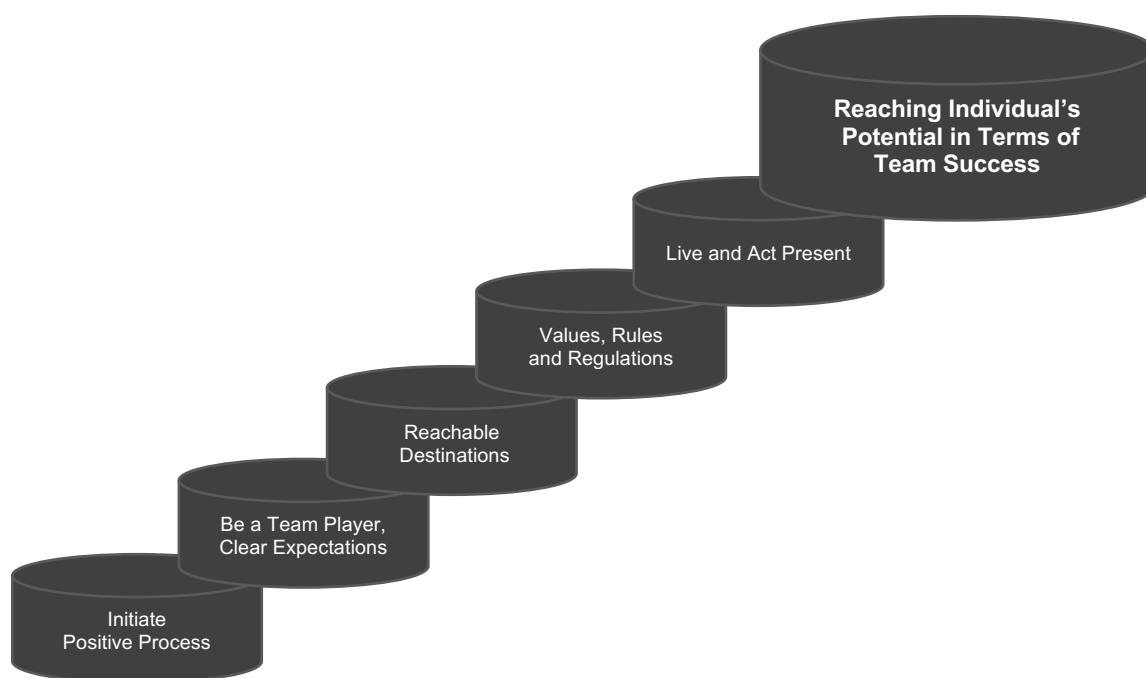


Figure 8. Steps of reaching individual's potential

7 The Stages of the Project

The stages of the project are the steps we took to fulfil our project goals. As figure 9 shows, we started with profiling of players and setting common and individual goals for the season. Furthermore, it was the execution of training camps, tournaments and exhibition games. The last stage focused on the performance of the team at the World Junior Championship.



Figure 9. The stages of the project

7.1 Profiling the Players

Profiling players was our first step at the beginning of our program. We had a new coaching staff and a lot of players, newcomers coming to the first camp we did not know personally. Profiling players consisted of Individual meetings and conversations with the coaching staff, General information questionnaire and Physical and medical testing at NŠC.



- Individual meetings and conversations with the coaching staff

We invited 36 players into the first training camp at the end of June (see Table 6). The aim and purpose of this training camp was to get to know every player and to gather as much information about them as possible. The schedule of the camp included two practice sessions a day on the ice, one off-ice practice session, warm-ups, and cool-downs. It was a very tight schedule for the implementation of conversation meetings with players so we set aside time precisely. We could possibly have an interview with 5 - 6 players a day. The meeting schedule was created for the team so players knew when and where their conversations took place. We tried to create a friendly and relaxed atmosphere with players. Depending on weather conditions, the meetings were mostly held in the outdoor outside areas such as facility terrace or barbecue shelter. The time spent individually with each player took approximately 25 min. Questions given to the players were selected randomly, and one of the coaches tried to write everything down. We wanted to know:

- How players were preparing themselves during the summertime, where and with whom, (individually or with some group)
- If players worked with S&C coaches
- How players see their role in the national team

- What kind of player they think they are
- What kind of situations players used to play in the game (PP, PK, overtime 3 vs 3..) or just some of them
- Questions about leadership (on and off the ice, in the locker room)
- What are their expectations and goals for the season
- Where players will play (club, league)
- What channel for communication players prefer the most (personal, through social medial..)
- Who are their best friends in the national team
- Questions about personal life, family, friends, girlfriend, school and more...

Table 6. Timetable of profiling players

Profiling Players	Period			
	Jun	July	August	September
• Individual meetings and conversations with coaching staff				
• Physical and medical testing at NŠC				

- General information questionnaire

Basic or general information about each player was gathered using questionnaire shown in Table 7, created in google forms and sent to the players via link to Whats'App team group.

Table 7. General information questionnaire

Name & Surname	Email	Home address	Cell phone
Player	✓	✓	✓
Player's agent	✓		✓
Player's parents	✓		✓
Player's club coach	✓		✓
Current club	✓	✓	✓

- Exercise and medical testing at NŠC

All players were tested at NŠC (National Sports Centre). In the field of sports training, the mission of the NŠC is to ensure general care for athletes with the aim of increasing their sports performance and achieving valuable sports performances at the highest domestic and foreign sports events. In the area of health security and training, exercise testing provides information about the athlete's current state of training through health and functional examinations, a unification of specific methods of assessing athletes training, archiving

and processing the data obtained for further planning of sports training and its evaluation. Part of the department's work is a research activity aimed at increasing the performance of athletes. NŠC could test up to 7 players per day, and we had to take into account the availability of the facility. NŠC gave us 10 fixed terms when they were able to do diagnostics and testing in a range of five weeks. Players selected days that were the most suitable for them. Summary tests provided:

- Anthropometry
- Pro Agility test 5-10-5
- Optojump (SquatJump, Counter Movement Jump (CMJ), CMJ Free Arms)
- Tendo Power Analyzer (Squat-10 reps, Bench press- 10 reps)
- Monark bike ergometer – 30-second Wingate test

Test results were discussed with NŠC testing specialists and national hockey S&C coach. Recommendations for the physical development of each individual were given to the S&C coach and national coaches. Profile of each player on the national team was a collection of individual talks, general information questionnaire and physical and medical testing at NŠC. All profiles were uploaded into the common google drive shared with members of the coaching staff.

7.2 Setting Common and Individual goals for the season

The major goal of the Slovak junior national team was the best possible performance at the world junior championship. We tried to set high but attainable goals in line with our expectations and abilities. In order to better fulfil the primary goal, which was to advance to the championship quarter-finals or to the semi-finals, we had to set smaller goals, as shown in Figure 10, and try to achieve them before the start of the tournament. The goals we tried to achieve were set for the program, coaches, players, and the team.

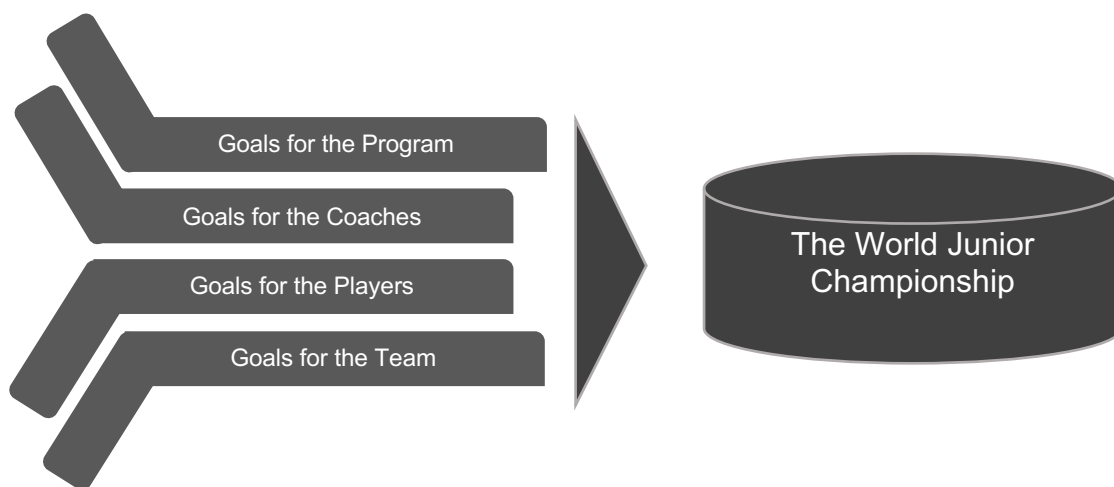


Figure 10. Common and individual goals

7.2.1 Goals for the program

The centralized program of the U20 national hockey team has lasted continuously for the last twelve years. The young players were part of a centralized project, trained together and played as a team in a men's competition. During this period, the program did not produce enough quality players for the A men national team's needs. Therefore, the Slovak Ice Hockey Association decided to cancel this program before the upcoming season and let the players develop naturally at the club level. Players started playing in various clubs and participated in competitions of different levels, such as the junior leagues, the top men's competition, and the men's first league.

To prepare these players for the needs of the junior national team, in addition to the pre-scheduled tournaments, we had to devise a plan to invite these players to training camps as often as possible. After the official announcement of the calendar for the season, we began to plan the dates of short-term training camps. These camps lasted a maximum of three days, during which we managed to carry out five to six ice sessions. Due to time and distance, we could only invite players from Slovakia or the Czech Republic to these training camps.

The main objective of the program goals was, therefore, to have as many training sessions as possible to jointly prepare the junior national team, while giving a chance to a large number of players.

7.2.2 Goals for the coaches

There was huge responsibility on the shoulders of the coaches. Preparing a team whose individual players are spread across the world in various leagues was a difficult task. During the short-term camps, we focused on rehearsing the game system and improving the game skills of individuals.

The inherent role of the coaches was frequent communication with players and teaching players the game system and tactics. Players come to the national team with habits from their clubs, so it was important to emphasize frequently the game requirements and system that we demanded from players. Another task of the coaches was to monitor the performance of players playing in competitions for their clubs. The coaches had to agree among themselves when and what matches to watch in order to keep track of as many players as possible. We gained scouting reports about players playing abroad through independent scouts or by watching online matches if these competitions had such broadcasts.

Regular analysis of matches using the game analysis program was a part of the daily work of the coaches. Therefore, the main goals of the coaches for the preparatory period were good communication with players and, among national coaching staff, communication with club coaches and scouts, careful planning of ice sessions during short-term camps and analyzing junior national team games, tracking players in their competitions, preparing and running presentations for educating players and trying to choose the right ones for the final world tournament.

7.2.3 Goals for the players

Being a national team player is the desire and dream of every player. At least in this way, most boys presented themselves when we worked out their profiles. Having dreams and goals is a very important part of sports life, especially among young athletes. However, the most important is the way to reach these goals. Our coaching task is to help players fulfill their desired goals.

After elaboration of player profiles and thorough analysis of fitness levels of individuals, we prepared a solution for players for their own development at the club-level environment. Players discussed the results of their tests at the beginning of the program with a strength and conditioning coach and set their own goals to improve some areas of their physical parameters. The players had different workloads in the games, there were also differences in the training process in their clubs. Therefore, it was very important to maintain and regularly improve physical fitness levels individually according to the needs of meeting the physical requirements of a junior player at the international level. Our strength and conditioning coach had created samples of exercises for off-ice practices to work on strength, explosiveness, agility, and endurance. The manual also included on-ice exercises that players could complete after practice in their club. All these materials were available to players on the google drive. Any questions could be discussed at any time with our strength and conditioning coach.

Regarding the goals for the game itself, most players set themselves the goal of playing regularly for the men's team. After completing the first training camps, players were advised as to which individual skills they should work on at the club level. This was also seen by players as their goal and motivation. So the main goal of each player was to improve their playing skills and improve their physical readiness at the club level.

7.2.4 Goals for the team

In a successful team, there is no word for „I or me“, but „we or us“. We have been trying to push this philosophy as coaches into the heads of our players since the first meeting. Each of us had expectations, but the expectations had to be clearly expressed. At the beginning of the program, we had to discuss how we would all approach the goals we set. The team is not just the players themselves. The whole team is the players, coaches, managers, trainers, doctors, and people who help the team. We all strive to create values, rules, and regulations that will guide us throughout the program and at the World junior championship itself. Each of us is responsible for our approach to responsibilities, discipline, and hard work.

The overall result can only come if all team members adhere to these values. The chain is as strong as its weakest link. Discipline means being not only on ice and in the game itself. It also means how to behave and act even outside the arena. One of the main goals of the team was also to create a positive atmosphere and coherence. Only in such conditions the whole team can progress towards the overall goal.

7.3 Execution of Training Camps, Tournaments & Exhibition Games

For every potential player who could get the opportunity to fight for his spot on the National team, we had to create enough space for them to present themselves. It was during training camps, tournaments and exhibition games in the final phase of preparation before the World Championship where the players had opportunity to show their skills.

7.3.1 Training Camps

We tried to organize as many training camps as possible to see and test as many players as possible (see Figure 11). Overall, we managed to run nine camps in the season, which were divided into three groups according to their purpose. The first group - three summer camps – aimed at inviting as many potential players as possible.

The first camp focused on getting to know individual players from the complex point of view and working on each individual's technical skills. Profiling players represented the key part of this camp.

For the second and third camp we first and foremost tried to invite players playing in international competitions who were not available for the camps throughout the season. The quality of the players invited to the second and third camps was to form the basis of the World Championship team. During these two camps, we were gradually setting goals

for the overall training process, introducing players to the overall philosophy and activities planned for the upcoming season. All players had individual meetings with the coaches as part of the profiling, and in addition, they underwent exercise testing at the NŠC (National Sports Centre). Besides the on-ice and off-ice practices, educational meetings focused on the tactical preparation and the National Team play system were held. In the meantime, the players participated in teambuilding activities.

The following practice stage consisted of five training camps. These were seasonal camps where mostly players from the home Slovak competitions or neighboring Czech Republic were invited. These camps were shorter due to the intense competition agenda. They lasted three days and we carried out five to six training units on ice. We dedicated part of the seasonal camps to the meetings aiming at rehearsing tactical instructions and game systems. This proved to be very important because the young players brought with them different habits of the game system and tactics from their club teams.

The last two training camps were focused on the peak of the season. All players from Slovakia and Europe were invited to the penultimate camp. In the final camp, we already had all the players available, including those who played overseas. The main goal of the last camps was to rehearse tactical and system elements and to repeat the team goals. Due to the high level of play at the World Championship tournament, we tried to focus on high game-like intensity. Players were therefore monitored. All of them wore heart rate monitors, we monitored actual values in real time during training units. During the two-week final preparation players were asked to complete the questionnaires on the daily basis which was a part of the players' monitoring. The players completed the Wellness Questionnaire each morning before breakfast. After each training unit or match, the players evaluated the total load by RPE. These data were evaluated and used to subsequently adjust to the training load on ice. In addition, the boys planned teambuilding activities to strengthen the team spirit as well as team dinners.

7.3.2 Tournaments & Exhibition Games

Preparatory games and tournaments are primarily used to test players for the needs of the national team and, at the same time, it is an opportunity to try things out of the training process. Matches will reveal the performance of individual players and the shortcomings in our game, which need to be further improved. We divided the scheduled tournaments and exhibition games into three stages based on the period they were held: two tournaments in the pre-season, one tournament in the season, and the final exhibition matches in the last preparation stage for the World Championships. All tournaments and matches were played in Slovakia.

The first two tournaments in the pre-season were aimed at introducing the new, for some players, unknown, game system and tactical plan. We also needed to see how individual players react in game situations. The first tournament hosted U20 teams from Germany and Denmark, and U19 team from the Czech Republic. A large group of players, mainly those participating in international competitions, was given the opportunity to play at these tournaments. This group of players was to form the basis for the World Championship. Despite many shortcomings in our game, we won all three games, which was a good impulse for further work. The second tournament in the pre-season hosted adult competition A-teams as well two teams from the highest Slovak Tipsportliga and one Romanian competition A-team. The game pace and speed in these matches were slightly higher than in the previous tournament. The boys managed to adapt and play relatively even games against men category, resulting in two wins and one defeat. The goal of this tournament was to test how our players were able to cope with the speed and tactical maturity of the opponent. It was very important for us to find out which players showed character, competitiveness and in particular discipline. All these qualities were important in forming our goals.

We played the last tournament in the mid-season. It was a tournament of four countries - U20 teams from Switzerland, Germany, and Norway. The tournament took place at the time of association break, so we had the opportunity to nominate players from European leagues. Before the tournament, at a short three-day camp we focused on improving the game system as well as Power and Penalty Killing plays. After not so successful entry into the tournament - the opening loss - we won following two games. The overall game performance has been improving.

In the final preparation stage, we played three challenging exhibition games - against Slovak Olympic Selects, U20 teams Russia and the Czech Republic. This was the peak of the preparation. With the exception of a balanced match against the Czechs, we were not able to compete with two very strong and high-quality rivals, who surpassed us in many ways. These last matches have revealed our weaknesses and shortcomings in the game. They were also a prerequisite for the final nomination of players for the World Championship.

During all the matches we had the opportunity to create a daily routine similar to the one in the World Cup conditions. The all-day regime was thoroughly planned. All matches were videorecorded and after the matches we made a thorough analysis for several hours. We used the cut clips for pregame meetings and educational presentations. For recovery purposes, a masseur and a doctor were available for the players if needed.

Week		Mon	Tue	Wed	Thu	Fri	Sat	Sun		
24	June	10	11	12	13	14	15	16		
25		Hockey Summer trainig Camp, Nemestovo, Slovakia 16.6 - 20.6.				21	22	23		
26		24	25	26	27	28	29	30		
27	July	1	2	3	4	5	6	7		
28		8	9	10	11	12	13	14		
29		15	16	17	18	19	20	21		
30		22	23	Training Camp in Bratislava, Slovakia 24.7. - 26.7.			27	28		
31		Camp in Bratislava, SVK 28.7. - 30.7.		Summer Hockey Challenge , 4 countries tournament , Poprad, SVK 31.7 - 3.8.			4			
32	August	U18 HLINKA GRETZKY TOURNAMENT SCAUTING - (SVK18 vs SWE18, USA18, RUS18 and SUI18)					10	11		
33		Training Camp in Detva, Slovakia 12.8. - 14.8.			Podpoliansky Cup, Detva, Slovakia 15.8 -17.8.			18		
34		19	20	21	TATRANSKY CUP 2019, Poprad, SVK SCAUTING - 6 GAMES			25		
35	September	26	27	28	29	30	31	1		
36		2	3	4	SCAUTING – T.Liga		6	7	8	
37		9	10	11	SCAUTING – T.Liga		13	14	SCAUTING – T.Liga	
38		16	SCAUTING – T.Liga		18	19	SCAUTING – T.Liga		21	SCAUTING – T.Liga
39		Training Camp in Ziar nad Hronom, SVK 23.9 - 25.9.			SCAUTING – T.Liga		27	28	SCAUTING – T.Liga	
40		30	SCAUTING – T.Liga		2	3	SCAUTING – T.Liga		5	SCAUTING – T.Liga
41	October	Training Camp in Ziar nad Hronom, Slovakia 7.10 - 9.10.			10	SCAUTING – T.Liga		12	SCAUTING – T.Liga	
42		14	15	16	17	SCAUTING – T.Liga		19	SCAUTING – T.Liga	
43		21	SCAUTING – T.Liga		23	24	25	26	SCAUTING – T.Liga	
44		28	29	30	31	SCAUTING – T.Liga		2	SCAUTING – T.Liga	
45	November	Training Camp in Piestany, Slovakia 4.11. - 6.11.			4 Countries Tournament in Piestany, Slovakia 7.11 - 9.11.			10		
46		11	12	13	14	SCAUTING – T.Liga		16	SCAUTING – T.Liga	
47		Training Camp in Ziar nad Hronom, SVK 18.11 - 20.11.			21	SCAUTING – T.Liga		23	SCAUTING – T.Liga	
48		25	26	27	28	29	30	1		
49	December	2	3	4	5	SCAUTING – T.Liga		7	SCAUTING – T.Liga	
50		Training Camp in Zilina, Slovakia 9.12. - 13.12.					14	15		
51		Training Camp in Zilina, Slovakia 16.12. - 24.12.			Olymp.team SVK - SVK20				CZE20 - SVK20, Trinec	
52		SVK20 - RUS20, Zilina	TRINEC, CZECH REPUBLIC, WJCH 24.12.2019 - 3.1.2020			SVK20 - KAZ20		FIN20 - SVK20		29
1		SVK20 - SUI20	SWE20 - SVK20	1	CAN20 - SVK20		3	4	5	

Figure 11. Season plan

7.4 Team Performance at the World Championship

The World Championship itself was a tournament for which we had been thoroughly preparing since the summer. We all had high expectations and we believed that we would fulfil the common goals that we set at the beginning of the program. Six weeks before the start of the tournament we were on an inspection trip to the city where we were supposed to play our games. This trip was attended by the team manager, head coach and assistant coach, video analyst, and team custodian. The purpose of this trip was to become familiar with the conditions we would be working under during the tournament. We had checked the quality of locker rooms, players' and coaches' rooms, stores for our material, area our video analysts could operate in, room equipment such as a TV, internet connection quality, drawing and preparation boards, warm-up and recovery areas. The organisers informed us about the security regulations during the tournament. Afterwards we went to see the hotel where we would live during the championship. We had an entire floor for

ourselves. A permanent room for video meetings and a dining room just for us. Wellness, sauna and swimming pool were also available within the hotel. As it was Christmas before the tournament started, we had to book a restaurant in advance and order a Christmas dinner.

7.4.1 Final roster

After the last exhibition game, we needed to choose the right players who would represent our country. To make such decisions, to cut some players off the final roster and tell them that they were not going to participate in the world junior championship was the hardest thing of the whole program we did.

During the final preparation, we had 28 players, from which we could register 23 in the final nomination due to championship rules. This consisted of eight defenders, twelve forwards, and three goalies. The tournament rules allow hockey associations to add at least fifteen players and two goalies at the start of the tournament into the official roster. This is because players playing at certain positions in the initial tournament games might get injured and teams could appropriately complete the roster. Since the city of the tournament was close to the borders of the Slovak Republic, we took one extra player to the team, who trained with us and was ready to play in the tournament in case someone got injured and at the same time the spot for adding to the tournament roster was still vacant.

Before the start of the tournament, we registered 21 players on the official roster. Seven defensemen, twelve forwards, and two goalies. Extra players (a defender, a forward, and a goalkeeper) participated in the entire training process during the championship and were ready to start to play in case of injury of one of the players on the official roster.

7.4.2 Daily program of the Slovak U20 Ice Hockey Team

The program of the Slovak national team during the tournament was prepared in detail, see example in Figure 12. Players had to be informed about the program beforehand to fully concentrate on one thing - to play as good as possible.

We tried the game daily routine several times during the preparation period, so players had these habits. The last exhibition games in the preparation phase were also scheduled as the first games at the World championship started (15:00). Game days consisted of: Wake-up call, breakfast, departure to the arena, warm-up, pregame skating, cool-down, departure to the hotel, lunch, relaxing in rooms, departure to the arena, game preparation, game, cool-down, departure to the hotel, dinner, relax and sleep in rooms.

25.12.2019	26.12.2019	27.12.2019	28.12.2019	29.12.2019
Streda	Štvrtok	Piatok	Sobota	Nedeľa
		7:00 Budiček	7:00 Budiček, raňajky	
	7:30 Budiček	7:30 Raňajky - hotel Vitality	7:45 Odchod z hotela - BUS	7:45 Budiček
8:00 Budiček	7:45 Raňajky - hotel Vitality	8:00 Odchod z hotela - BUS	8:00-8:30 Zapracovanie	8:00 Raňajky - hotel Vitality
8:30 Raňajky - hotel Vitality	8:30 Odchod z hotela - BUS	8:30-9:15 Zapracovanie	8:45-9:15 TJ fad - hlavná hala	8:45 Odchod z hotela - BUS
9:15 Odchod z hotela - BUS	9:00-9:45 Zapracovanie	9:30-10:00 TJ fad - hlavná hala	9:30-9:45 Cool-down	9:15-10:00 Zapracovanie
10:00-11:00 TJ na suchu - Werk arena	10:00-11:15 TJ fad - tréningová hala	10:15-10:30 Cool-down	10:00 Odchod zo štadióna - BUS	10:15-11:30 TJ fad - hlavná hala
11:30 Odchod zo štadióna - BUS	11:30-12:00 Cool-down	10:45 Odchod zo štadióna - BUS, obed	10:30 Obed - hotel Vitality	11:30-12:00 Cool-down
12:00 Obed - hotel Vitality	12:15 Odchod zo štadióna - BUS	11:30-12:30 Oddych na izbách	11:00-12:30 Oddych na izbách	12:15 Odchod zo štadióna - BUS
12:30-15:00 Oddych na izbách	12:30 Obed - hotel Vitality	12:45 Odchod z hotela - BUS	12:45 Odchod z hotela - BUS	12:30 Obed - hotel Vitality
15:15 Snack - hotel Vitality	13:00-16:00 Oddych na izbách	13:00 Príprava na zápas	13:00 Príprava na zápas	13:00-16:00 Oddych na izbách
15:45 Odchod z hotela - BUS	16:00 Olovrant - hotel Vitality	15:00-17:30 Zápas SVK - KAZ	15:00-17:30 Zápas FIN-SVK	16:00 Olovrant - hotel Vitality
16:15-17:00 Zapracovanie	16:15-18:15 Prechádzka/osobné voľno			16:15-18:15 Prechádzka/osobné voľno
17:15-18:30 TJ fad - hlavná hala				
18:45-19:15 Cool-down				
19:30 Odchod zo štadióna - BUS	18:30-19:00 Meeting - hotel Vitality	17:30 Cool-down	17:30 Cool-down	18:30-19:00 Meeting - hotel Vitality
19:45 Večera - hotel Vitality	19:30 Večera - hotel Vitality	18:15 Odchod zo štadióna - BUS	18:15 Odchod zo štadióna - BUS	19:30 Večera - hotel Vitality
20:15 Osobné voľno	20:00 Osobné voľno	18:30 Večera - hotel Vitality	18:30 Večera - hotel Vitality	20:00 Osobné voľno
22:00 Na izbách	22:00 Na izbách	22:00 Na izbách	22:00 Na izbách	22:00 Na izbách

Figure 12. Example weekly schedule

7.4.3 Tournament meetings

All tournament meetings were focused on the preparation and analysis of games. After each game, we spent many hours behind computers. All the games were elaborated in detail by our video analyst. His work consisted in making marks of situations during the real time of the game in a program for hockey analysis such as turnovers, faceoffs, opponent's powerplay, shots at the goal, our and opponent's chances, penalty killing, etc. It was easier for coaches to find, sort and process certain game situations in the program into short video clips.

We tried to schedule player meetings mostly in the evening time the night before the game. Each meeting had a maximum duration of 20 minutes to maintain a players' concentration. In the video clips, we showed players the overall game of the opponent, such as forechecking, play in the offensive or defensive zones and so on. Then there were clips of opponent's special team plays such as power play and penalty killing. Players were given information about the most dangerous players of the opponent team as well as weaker areas in the opponent's game. At the end of the meetings, we tried to motivate the players with video clips of our game where we played very well. We ended the meeting by appointing a line-up for the upcoming game.

When we played back-to-back games, we tried to plan the pregame meeting before lunch and shorten the length of it into 15 minutes. In these meetings, we tried to focus explicitly

on the upcoming opponent, and shortly we mentioned how we performed in the previous game.

7.4.4 Tournament performance

Our main goal was to advance at least to the quarterfinals. Our first opponent was the team of Kazakhstan, which was supposed to be the outsider of our group. In our game, there was a lot of nervousness but, in the end, we managed to beat the opponent, which calmed the team. It was a great start to the tournament.

After that, we lost the next three games against Finland, Switzerland, and Sweden. It should be noted that the quality of those teams was at a higher level but our game lacked discipline, players committed too many fouls, which cost us a lot of strength and goals against. We were also dissatisfied with the conduct of our power play and penalty killing except for the first game. Nevertheless, the players tried hard but did not achieve the quality level of international junior hockey.

For the quarter-final game, we traveled by bus to the other city for 1 hour. In the quarter-finals, we faced a very strong and confident opponent, the team of Canada. The players felt big respect but stepped into the game with great determination. We kept pace with our opponent only during the first period. Subsequently, Canada's players showed great superiority and defeated us smoothly. This loss has ended the tournament for us. Overall, we finished eighth.

8 Results of the Project

This project was aimed to prepare the Slovak U20 national hockey team for the World junior championship. The results are organized in the following two sections: project objectives and project stages.

The project's main objectives were to create a cohesive team, utilize an athlete-centred coaching style approach, prepare the team tactically, and to reach individual's potential in terms of team success. All these objectives of the project were subsequently applied into the project stages.

Gradually, the stages of the project resulted from the profiling of the players, setting of individual and common goals for the season, execution of training camps, tournaments and exhibition games. The final stage was the performance of the Slovak U20 national hockey team at the World junior championship.

At first, the results address the benefits and applicability of the project for future coaches. The discussion part gives the reader an insight as to which areas of the project were successful and, on the contrary, the author suggests recommendations as to what has to be improved based on the project shortcomings.

9 Discussion

The following paragraphs will address the improvements and correlations of the results to help coaches in creating a better program in the future for preparing the Slovak national junior hockey team.

Our personal findings revealed deficiencies which had roots at the beginning of the season in profiling the players. The work we had done in profiling lacked psychological components of each player, which resulted into unexpected behavioral situations during the season. The pre-season emphasis was to get to know all the players which we sought to do through meetings and interviews. Our main focus was to obtain basic more related information, such as player's season goals, strong or weak sides of their game, hobbies, interacting on and off the ice and so on. We didn't take into account player's psychological aspects.

I would recommend seeking help from a specialist working in the field of sport psychology or mental coach for such thorough findings to help us better reveal and find effective information about the players. Furthermore, we need to better understand how to use these findings and their implementation in a practical way. Each player requires a different approach from us and without such psychological profiling it will be more challenging for the coaches. Player's personalities, especially at such a young age, have a great influence on team dynamics and group cohesion.

Another major aspect which was missing and definitely needs to be improved is related to group cohesion. Definition of team mission of the program wasn't implemented in the best possible way. The mission statement defines a group's purpose, describes the beliefs in how the group should function, and indicates the unique values of the group. Who are we? Where are we going? How are we going to get there? Those words were obviously understood but weren't spoken clearly, not even presented and created by the whole team. They were left in the cloud of collective mindset and, in my opinion, each member of the team had taken it in his own way.

One of the suggestions for the next project is to create a team mission statement at the beginning of the season where each member of the national team, especially the players will participate in. Furthermore, the mission statement would be visible everywhere the team would go and would capture the spirit of what team members believe and desire.

The success of the whole program depends not only on the quality of the program, training sessions, challenging tournaments, and exhibition games but also on the number of quality players.

During the whole season, we worked with a very small group of players. The number of players who at least met the criteria for participating in the World Championship was very low, approximately 50 players. Out of this number of players who met the higher criteria of international junior hockey and had sufficient qualities was a maximum of ten. Only one player of our team has been drafted by the NHL team. Another major deficiency of our players was the average level of individual playing ability and low technical skills. This had a great impact on the quality of the training process and games. The average ice time of players playing in the domestic men's competition was 3-5 min on average. It is little time to develop playing ability, it seems more counterproductive, players tend to deteriorate in such conditions. A large part of our players only played in junior competitions, either domestic or foreign. By comparison, the top international teams had players who had been playing regularly at least two seasons in top men's leagues before the world championship started, and most of these players have been drafted by the NHL teams. These quality differences could not be replaced by training camps or several international tournaments.

To compete with the world's top teams and have higher ambitions at the World junior championship, we must certainly improve the training process of future players at a much earlier age, 14 - 15 years of age. This could be done by building new hockey academies, implementing new training methods at youth clubs to develop players, and promoting better cooperation with club youth coaches. If we succeed to pursue these enhancements, the first results may come within 4 to 6 years.

Another important element is the player's hockey base. In Slovakia, recruitment of children for hockey has recently improved, but we can expect the benefit for the national junior team in 10-12 years at the earliest. From this point of view and at the same time the progression of advanced hockey countries, it is very difficult to estimate the success in the form of some medal placement at the World junior championship. Rather, the actual outcome will appear to remain in the top A category of the World Junior Championships. Until then, we have to focus every season on maximizing the potential of each player we have.

Certainly, as coaches, we made some mistakes in such demanding work. I think we could have worked more closely with players at some stages. For example, in setting goals, we could have given more space to the players and listen to their ideas, although it would be

more demanding in terms of time. We were not used to focusing on such areas due to cultural differences compared to other countries.

To develop high-level quality players, they must also have adequate playing and training conditions. It is very difficult for young players to find and fight for a spot among men at such a young age. Slovak Ice Hockey Federation could also help by focusing on the expansion of the 1st senior league, where many more juniors would have the opportunity to play men's hockey and have a better chance to develop themselves.

Finally, I would like to evaluate my own learning and development. The experience of being a member of the national team coaching staff enriched my coaching qualities in many ways. The everyday learning from my colleagues helped me strengthen my coaching abilities. Developing our young players who are at the beginning of their careers and helping them to grow individually allowed me to question some of my beliefs. I tried to share the knowledge I have learned at the academic field and combine it with my long playing career and experience. This opportunity reassured myself that being a coach is an ongoing process which needs to be constantly learned and developed.

From an academical point of view, the whole project of writing this undergraduate thesis put me in a challenging position. At the same time, it has shaped me and allowed me to grow as a writer and researcher. Moreover, other coaches may benefit from my work as well.

This project was done for one national team and during the half-season only. The players of the national team were constantly changing in a short period of time. My suggestion for future researchers is to do such a project with more national teams for the entire season. I suggest involving a specialist from a sport psychology field to have a better effect on project results.

10 References

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Appendices

Appendix 1. Recommendations for individual development in terms of physical training

ANAEROBIC ENDURANCE TRAINING

The training is focused on the development of anaerobic abilities and is performed in the gym. There are training options to choose from, and the player chooses only one at a time, depending on the conditions he has. The load is carried out either on an air-bike, spinner or slideboard. The player also chooses whether to concentrate more on the *Power* or *Capacity* component.

- suitable 2 or more days before the game
- also at a time when, players do not have practice or the player wants to intensify the practice and can perform it after practice on the ice

AirBike

AirBike	POWER	CAPACITY
Repetitions	10x	4 – 6x
Intensity	100% - 95% of max effort	85% - 95% of max effort
Time of work	15 s	30 s
Time of rest	1 min.	3 min.

If there is a possibility, the player also watches the Watt power and the goal will be to produce as much watts as possible and try to maintain them throughout the load and in each repetition.

Spinner

Spinner	CAPACITY	
Repetitions	12 – 15 x	Heavy transfer
Intensity	85% - 95% of max effort	
Time of work	45 s	Heavy transfer (80 rpm)
Time of rest	1:15 min.	Light transfer (120 rpm)

If possible, the player also checks the heart rate using a heart rate monitor (Polar, Garmin, Suunto) and tries to reach a level of about 90% of the maximum heart rate (about 190 beats per minute).

Slide-board

Slideboard	CAPACITY
Repetitions	10x
Intensity	90% - 95% of max effort
Time of work	30 s
Time of rest	1:30 min.

If possible, the player also checks the heart rate using a heart rate monitor (Polar, Garmin,

Suunto) and tries to reach a level of about 90% of the maximum heart rate (about 190 beats per minute).

SPEED TRAINING

Training is focused on the development of speed. It is done by gradually moving from one exercise to another. The purpose is to perform the exercise as quickly as possible, focusing on the technique of movement execution.

- develops especially the speed component of the player
- suitable 1 or more days before the game, also at any time before training (in a smaller volume, if a player is accustomed, it can be done on the game day as activation)
- the training unit consists of 5 individual exercises
- each exercise goes gradually into a circle, from one exercise to another
- player does each exercise in 3 sets / rounds
- the rest period after each round is 2 min
- the rest interval after each exercise is 1 min
- player can find individual exercises in the attached links on youtube.com

	Name of exercise	Repetition	Link
1.	Chest pass hinge	12	https://www.youtube.com/watch?v=UIDE2DWbLVQ
2.	Quickness	12	https://www.youtube.com/watch?v=1VjzbtY8_KM
3.	Landmine press split	8 each	https://www.youtube.com/watch?v=teTYSYoS6AI
4.	Bands pulls	12	https://www.youtube.com/watch?v=pL0I6fNJaOM
5.	Lateral lunge with dumbbell clean	8 each	https://www.youtube.com/watch?v=zYgYCvyVybK

POWER - SPEED TRAINING

Training is focused on the development of power - speed skills. It is done by joining one power - speed exercise together in combination with core exercises.

- develops in particular the player's power component, but with regard to the speed of movement
- suitable two or more days before the game, also at any time before training (in a smaller volume, if the player is used to, it can be done the day before the game)
- the training unit consists of four exercises, where each exercise consists of two parts
- each set has two consecutive parts without pause (strength-speed exercises and then core exercises with a very short pause)
- player does each exercise in three sets
- player can find individual exercises in the attached links on youtube.com
- 1st part exercise - heavier weights / resistance (60% - 95% of maximum) in 6 reps
- 2nd part exercise - BW, exercise is performed in the most controlled way, medium speed

	Name of exercise	Repetition	Link
1.	Hang clean BB Knee 2 Chest Alternate	4-6 10	https://www.youtube.com/watch?v=9K9fHGmNi4U
2.	Squat jump BB Shoulder Tap Plank	4-6 8 each	https://www.youtube.com/watch?v=aC3P9PFOQA0
3.	Landmine press split squat Pallof press	4 – 6 each 10 each	https://www.youtube.com/watch?v=Z7mHSu07QEM
4.	Medball throw rotation Plank antirotation Aquahit	4-6 8 each	https://www.youtube.com/watch?v=dK6hOsR5Hfc

CONTRAST TRAINING

Training is focused on the development of strength and power. It is done using a contrast method, which means that the strength training comes first and then the player performs a quick exercise, focusing on the fastest possible execution of exercise.

- separate development of the force component and then the concentrated development of the speed component
- suitable two or more days before the game, also at any time before training (in a smaller volume, if the player is used to, it can be done the day before the game)
- the training unit consists mostly of 3 - 4 exercises, each consisting of two parts
- each series has two consecutive parts without a break (strength exercises followed by speed exercises without or with a very short pause)
- player does each exercise in 4-5 sets
- player can find individual exercises in the attached links on youtube.com
- 1st part exercise - heavy weight (90-95% of maximum) in 5 reps
- 2nd part exercise - BW, exercise is carried out as explosive as possible by 5 reps

	Name of exercise	Link
1.	Squat-jumping over high obstacles	https://www.youtube.com/watch?v=PX_rphkrvdc
2.	Lunge + jump on box (bench)	https://www.youtube.com/watch?v=uKPLvRex058
3.	Hip Hinge + glute bridge	https://www.youtube.com/watch?v=snMICLqDKzo
4.	Prowler + 8-10 m sprint	https://www.youtube.com/watch?v=NRmujRy_DBU
5.	Bench over + throws with medicine ball	https://www.youtube.com/watch?v=Hohy4YP21hk
6.	Pull-ups + medicine ball throws on the floor	https://www.youtube.com/watch?v=U9_4yXqfJVs

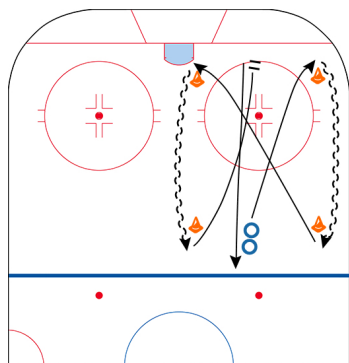
TRAINING ON ICE

Training is focused on developing special endurance on ice. Individual ice exercises are focused on special endurance with a focus on *Performance* or on special endurance with the focus on the player's *Capacity*. The same exercise is used in the training plan, but there will always be a difference in the number of repetitions, the length of rest and the number of series.

Exercises are suitable for inclusion after training on ice if there was not enough ice time, or 2 (3) or more days before the game. Player only needs to choose one exercise (not all exercises) and focus on either *Performance* or *Capacity*. If a player has the opportunity to

do two types of training on ice for one week, one training is focused on *Capacity* and the other on *Performance*.

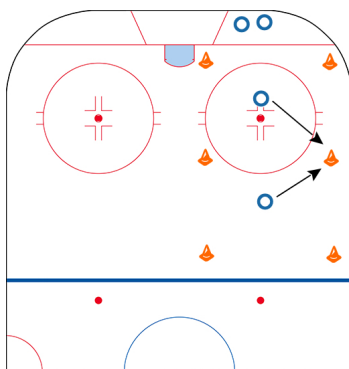
Skating agility: forward and backward



The player skates forward towards the first cone, where he makes a turn into skating backwards to the second cone. He then skates diagonally forward to the cone across, turning back into skating backwards, then starting forward to the level of the stands, stops and sprints back to the starting line.

Exercise 1	POWER	CAPACITY
Number of repetitions in 1 series	4x	8x
Intensity	100% - 95% of max effort	85% - 95% of max effort
Ratio	1:3(4) or 35 – 40 s	1:1(2) or 15 – 25 s
Number of series	2 - 4	4 - 5
Rest between sets	4-5 min.	4 – 5 min.

Mirroring

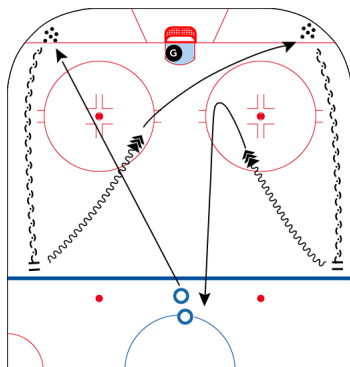


The exercise is performed in pairs, if the player does not have a pair, the coach can show him in the middle of the square. One player shows, the other player repeats after him. Each player has his square in which he moves. The player who shows moves freely (according to himself) and the player, in contrast, mirrors it in his square.

Exercise 2	POWER	CAPACITY
Number of repetitions	4x	6x
Load time	12 s	15 s
Intensity	100% - 95% of max effort	85% - 95% of max effort

Ratio	1:4 or 90 s	1:2 or 45 s
Number of series	2-4	4-5
Rest between sets	4-5 min.	4-5 min.

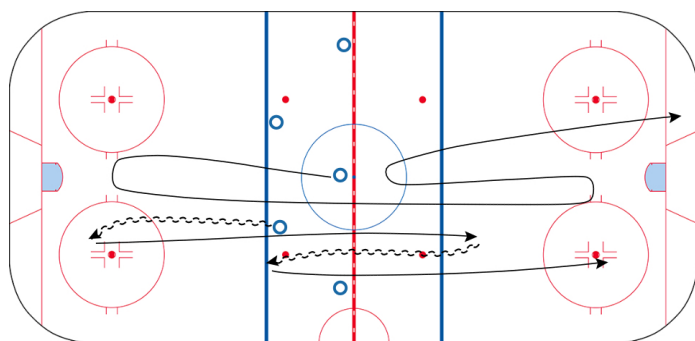
Special endurance skating with a puck (forwards and backwards)



The player starts skating from the blue line to the corner with maximum effort, takes the puck and skates towards the blue line (defenders backwards), where he makes a stop and then shoots at the goal. After shooting, the player continues to the second corner and repeats as shown.

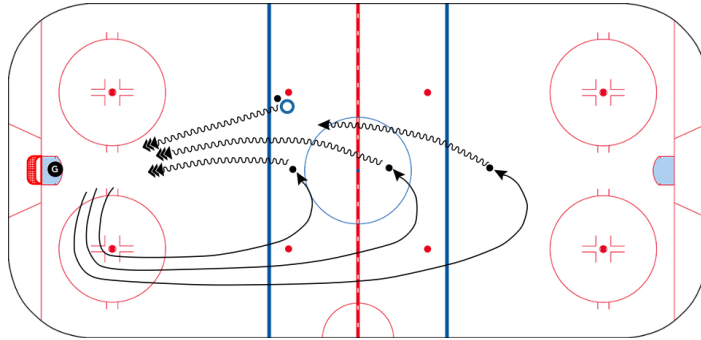
Exercise 3	POWER	CAPACITY
Skating	1 x left + 1 x right	2 x left + 2 x right
Intensity	100% - 95% of max effort	85% - 95% of max effort
Ratio	1:3 or 45 – 60 s	1:4 or 60 - 90 s
Number of series	1	1

Skating according to player's role and space



Players are skating as shown. The attackers are skating forward intending to simulate a constant transition from offense to defense and from defense to offense. The attackers move within their spaces (wing, center). The defenders are also skating backwards. The exercise is focused on *Capacity* in special endurance.

Exercise 4	CAPACITY
The number of repetitions in a series	6 x
Intensity	85% - 95% of max effort
Ratio	1:1 or do 20 s
Number of series	3 - 4

Repeating shooting in special endurance

The player stands on the blue line with the puck and shoots at the goal. After shooting, the player continues beyond the face-off dot and skates towards the red line, where he takes the puck and shoots at the goal. He skates again at the face-off dot and towards the second blue line, where he takes the puck and shoots the third time at the goal. Exercise is repeated by the player first to the left, then the right side with a break between reps.

Exercise 5	POWER	CAPACITY
The number of repetitions	4x (2x left / 2x right)	8x (4x left / 4x right)
Intensity	100% - 95% of max effort	85% - 95% of max effort
Rest between repetitions	1:3 or 60 – 75 s	1:1 alebo 45 s
Number of series	1	1