ANALYSIS OF CONCEDED GOALS OF HC SLOVAN BRATISLAVA IN SEASONS 2012-2013 TO 2014-2015 IN THE CONTINENTAL HOCKEY LEAGUE

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Abstract

The aim of the research was analysis of conceded goals of HC Slovan Bratislava in seasons 2012-2013 to 2014-2015 in The Continental Hockey League (KHL) from the viewpoint of place into which the goalkeepers were conceded goals. Studied group involved 3 goalkeepers. The research was carried out by means of direct observation. Conceded goals were divided into 9 categories. From the viewpoint of place into which the goalkeepers were conceded goals the authors have found out, that the goalkeeper got 26% of empty net goals. Goalkeeper 2 got 32% of goals over the catch glove, which he wears on his left hand. Goalkeeper 3, similarly like Goalkeeper 1, the most often got empty net goals and thus 37% of the total conceded goals. In practice we recommend to do the statistics of places, into which goalkeepers the most often get the goals and based on their evaluation to focus the training process on particular weaknesses of goalkeeper or weaknesses of defensive activities of team.

Key words: *blocker, catch glove, goalkeeper, ice hockey, match, shot.*

Introduction

Ice hockey is defined by high skating intensity, rapid changes in frequency and duration and often contacts or touch of bodies (Montgomery, 1988).It is a game in which individual players get ahead while connecting whole team with game by their individualities. Hockey is a collective sport game, in which all players can show their individual qualities and abilities (Pavliš, Perič & Novák, 2000). A sportsman is leaded by the nature of ice hockey to creatively use the performed playing activities, which is conditioned by connection of physical and mental activity (Perič, 2002). Game performance of player has form of game activities of individual or game skill focused on solving of specific tasks. It is determined by individual bio-motoric-mental prerequisites and ability to apply them in connection with action of team mates and opponents in the match (Moravec, Kampmiller, Vanderka & Laczo, 2004). Every player in ice hockey has his specific position and role.

Goalkeeper is a central figure in hockey team. His basic activity is standing in the net, trying not to get a goal (Nykvist, 1998).In each team and any game system of players formation, goalkeeper is basic defensive pillar (Filc, 2010).Goalkeeper's role in ice hockey is often described by sensory perception time expenditure, in which the goalkeeper has to process visual information and make decisions (Ripoll, 1991). Reliable performance does not depend only on exact motor performance but also on efficient visual processing of information specific for the given situation (Savelsbergh, Williams, van der Kamp & Ward, 2002).

In hockey we talk about information connected with optical variables, which can be provided by kinematic information on opponent's move (Williams, Huys, Cañal-Bruland & Hagemann, 2009).It is required from the goalkeeper to be maximum concentrated, to be brave, resistant and to manage technique of each action, such as skating, getting up, moving in the net, catching or blocking, quickly, exactly and as perfect as possible (Bajtoš & Jurčenko, 2001). Goalkeeper must be physically and mentally able to handle multilaterally difficult activity. His activity involves all kinds of stress, in various order and intensity, mutually shading into each other (Horský, 1963).Hockey goalkeeper steps in 30 to 40 times during the match, sometimes even more. In his crease he does 400 - 500 various actions and moves in one match (Nykvist, 1998) and he faces shots with the speed up to 160km/h (Hache, 2002).

A condition for goalkeeper's success at mostly defensive action is perfect coordination of his moves in the crease, no useless moves and masterful usage of his equipment. It is necessary to pay increased attention to goalkeeper, so that he can be real support of his team. We need to analyse and diagnose weaknesses in the goalkeeper's activity during the game to increase efficiency of training process and focus on elimination of particular imperfections or weaknesses in the goalkeeper's game and actions. That's why we focused our research on analysis of places, into which the goalkeeper's

were the most often conceded goals in matches during the observed period
The aim of the research is analysis of conceded goals of HC Slovan Bratislava in seasons 2012-2013 to 2014-2015 in The Kontinental Hockey League (KHL) from the viewpoint of place into which the goalkeepers were conceded goals.

Methods

In the thesis we carried out a cross-section research of several stages with one group of ex-post facto selection. In the research we observed 3 goalkeepers of HC Slovan Bratislava in seasons 2012-2013 to 2014-2015 in KHL. A criterion to put goalkeeper into the research was goalkeeping at least in 15 matches in a season.

List of goalkeepers' put in the research and number of played matches in season is presented in Table 1. By means of direct and indirect observation in the research we were determining places into which the goalkeepers got goals in regular seasons of 2012-2013 to 2014-2015. Conceded goals were divided into 9 categories.

Results

Research results are evaluated from the viewpoint of places, in which particular goalkeepers of HC Slovan Bratislava hockey team got the goal during three seasons (2012/2013 – 2014/2015) in KHL and they are presented in percentage.

Table 1. Number of matches played by individual goalkeepers of HC Slovan Bratislava in seasons 2012/2013 to 2014-2015 in KHL.

Goalkeeper	Season 2012/2013	Season 2013/2014	Season 2014/2015
Goalkeeper 1	47	41	25
Goalkeeper 2		17	
Goalkeeper 3			36
Total	47	58	61

Evaluation of goals conceded to Goalkeeper 1

Goalkeeper 1 from Slovakia played in HC Slovan Bratislava in KHL in seasons 2012/2013 – 2014/2015 and he was the first goalkeeper in the first two seasons. In these three seasons he played in 113 matches of regular season, 54 of which were winning. He got 297 goals of the total 3340 shots and thus achieved save percentage 91.11%. He got shotout in 11 matches. From the total 297 goals he got 68 of them during the opponent's power play. Figure 1 presents place analysis of goals conceded to Goalkeeper 1 in seasons 2012/2013 – 2014/2015.More than one fourth of goals were conceded into empty net,

which we consider as his weakest point. The collocation "empty net" is understood as when the goalkeeper was outside his basic position (outside the crease) and he got an empty net goal. The most often it was a goal after rebound shots. Often running out of the net is typical for the goalkeeper's play, while trying to decrease the shooting angle. The second weak place is a space over the catch glove, which is held in the left hand. He got 17% of goals in this space, followed by 14% goals in between the legs and 12% of goals over and under the blocker. It is worth mentioning that Goalkeeper 1 got only 3% of goals between blocker and body and between catch glove and body.
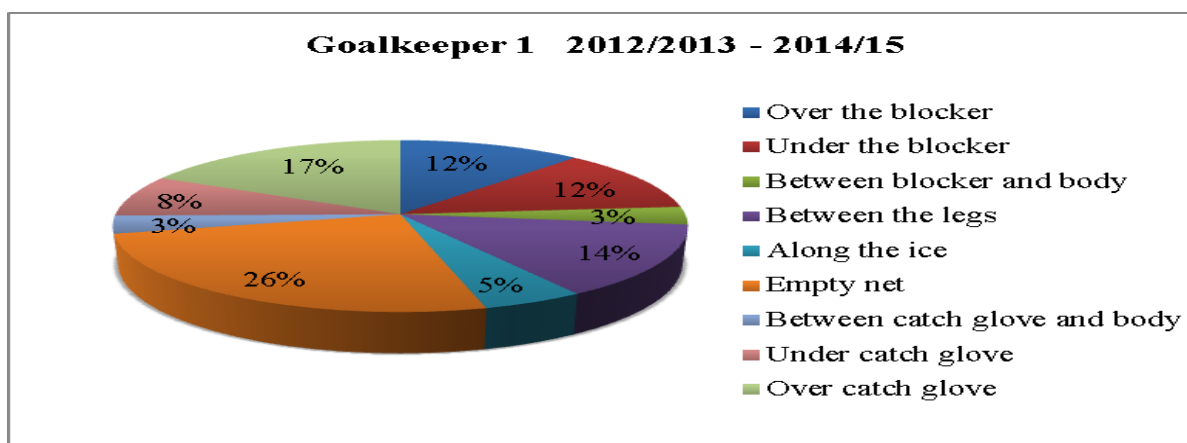

Figure 1. Presents place analysis of goals conceded to Goalkeeper 1 in seasons 2012/2013 – 2014/2015.

Evaluation of goals conceded to Goalkeeper 2

Goalkeeper 2 from Czech Republic played in HC Slovan Bratislava only in the season 2013/2014, in which he covered Goalkeeper's 1 back. In total he played in 17 competition matches, out of which 6 were winning and in which he got 38 goals out of 407 shots and thus he achieved save percentage of 90.66%. In 17 matches he did not have any shotout. He got 6 out of the total 38 goals during the opponent's power play. Figure 2 presents place analysis of goals conceded to Goalkeeper 2 in season 2013/2014. Goalkeeper 2 got the most goals over the catch glove in the left hand. In total it was almost one third of all conceded goals.

Upon the finding it can be said that upper left corner is the biggest weakness of this goalkeeper, which is a little surprising regarding the sturdy figure of the goalkeeper (he is 192 cm tall). On the left side he was conceded 11% of goals under the catch glove.

It is worth mentioning he did not get any goal between catch glove and body. On the side of blocker, thus on the right side, he got 13% of goals over the blocker, 10% under the blocker and 5% between blocker and body. We observed total 16% of goals conceded along the ice or in between the legs of Goalkeeper 2 and he was conceded 13% of goals into empty net.
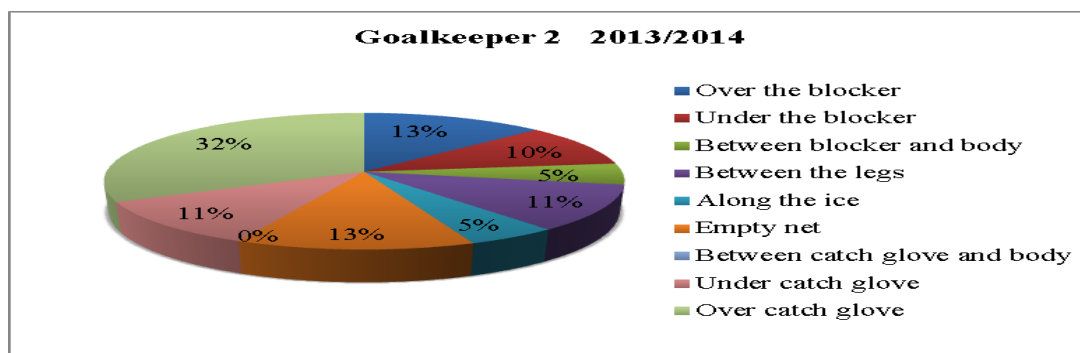

Figure 2. Presents place analysis of goals conceded to Goalkeeper 2 in season 2013/2014.

Evaluation of goals conceded to Goalkeeper 3

Swedish man Goalkeeper 3 played as the first goalkeeper in HC Slovan Bratislava in season 2014/2015. It was his only season in this team. The goalkeeper played altogether in 36 competition matches, out of which 12 matches were winning. At 36 matches Goalkeeper 3 got in total 94 goals out of total 968 shots on goal and he achieved save percentage of 90.29%. In 2 matches he got shotout. He got 24 of the total 94 goals during the opponent's power play. Figure 3 presents place analysis of goals conceded to Goalkeeper 3 in season 2014/2015. Goalkeeper 3 was conceded the most goals, 37%, into empty net.

It is connected with his often running out of crease trying to decrease shooting angle, similarly like Goalkeeper 1. Running out of the crease is considered as the biggest weakness of this goalkeeper. It can be said from the viewpoint of analysis of further conceded goals, that upper part of the net is another weak place of this goalkeeper. He got 16% of goals into the left upper corner and 12% of goals into right upper corner where goalkeeper's blocker is held. Space under the blocker, in which the goalkeeper got 13% of goals, is his weaker place. It is worth mentioning that Goalkeeper 3 got 11% of goals in between legs and along the ice, presenting thus strong goalkeeper on ice (Figure 3).
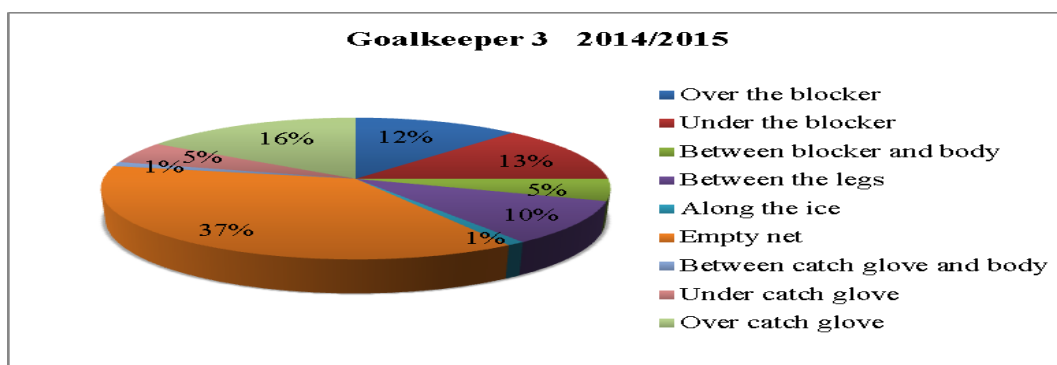

Figure 3. Presents place analysis of goals conceded to Goalkeeper 3 in season 2014/2015 Discussion.

Conclusion

It can be said from the viewpoint of places, into which the goalkeepers got the goal that Goalkeeper 1, who was catching in all three observed seasons (2012/2013 – 2014/2015) and was conceded up to 26% of goals into empty net. The most often it was a goal after rebound shots. Often running out of the net is typical for the goalkeeper's play when the opponent shoots the goal, while the goalkeeper is trying to decrease the shooting angle. However, when the opponent knows this, he shots with a concrete goal, so that the goalkeeper can block the pucks and players could finish the puck into uncovered net. From the viewpoint of other places, Goalkeeper 1 got 17% of goal over the catch glove, which he has in his left hand and he got 14% of goals in between his legs.

Goalkeeper 2, playing in season 2013/2014 got the most of the goals over the catch glove, which he wears on his left hand. It was in total up to 32% of total conceded goals. The second place with the most conceded goals of this goalkeeper was over his blocker (13% of goals). Therefore it can be said that the weakness of Goalkeeper 2 is upper part of the net. Goalkeeper 3 was the first goalkeeper in HC Slovan Bratislava in season 2014/2015. Similarly like Goalkeeper 1, he got the most often empty net goals and thus 37% of the total conceded goals. Upper part of the net is vulnerable for this goalkeeper as he got 16% of goals over the catch glove on the left side and 12% of goals over the blocker.

When comparing the findings at particular goalkeepers it can be stated that Goalkeeper 1 and Goalkeeper 3 were conceded the most goals and thus more than 26% into empty net, this is connected with not keeping the position and often and far running out of the crease. Goalkeeper 2 keeps the position and does not run out and far from the net so often and in comparison with Goalkeeper 1 and Goalkeeper 3 he has distinctive weaknesses in upper part of net, dominantly over the catch glove, where he got 32% of goals.

From the viewpoint of quality improvement of goalkeeper's and also team's playing performance it is important to do statistics of conceded goals and places, into which goalkeepers most often get goals. Based on these findings it is appropriate to focus training process on particular weaknesses of goalkeeper or weaknesses of defensive activities of the team. Regarding the goals conceded in empty net it is recommended to pay bigger attention on cooperation of team in defensive game between goalkeeper and defenders, not only by trained defensive playing system, but also by communication of goalkeeper with his team mates. When shooting into particular places of the net it is necessary to improve defensive playing activities of goalkeeper with special goalkeeper training focused on specific defensive activities of goalkeeper. In training process we recommend to do the statistics of places, into which goalkeepers the most often get the goal as it may help to focus the training process on particular weaknesses of goalkeeper or weaknesses of defensive activities of team.

References

Bajtoš, J., & Jurčenko, R. (2001). *Základy systematiky hry hokejového brankára*. [Basics of the system of hockey goalie play. In Slovak.]. Bratislava, Slovakia: Šport Press.

Filc, J. (2010). Hráčske posty a hráčske funkcie v ľadovom hokeji. [Player Posts and player functions in ice hockey. In Slovak.]. *Tréner ľadového hokeja,* 1, 178–181.

Hache, A. (2002). *The physics of hockey*. Baltimore, USA: The John Hopkins University Press.

Horský, L. (1963). *Hra hokejového brankára*. [Hockey goalie game. In Slovak.]. Bratislava, Slovakia: Šport.

Montgomery, D. L. (1988). Physiology of Ice Hockey. *Sports Medicine*, 5(2), 99-126.

Moravec, R., Kampmiller, T., Vanderka, M., & Laczo, E. (2004). *Teória a didaktika športu*. [Theory and didactics of sport. In Slovak.]. Bratislava, Slovakia: FTVŠ UK BA.

Nykvist, H. (1998). *Trénovanie brankárov a spolupráca trénerov.* Zürich: Medzinárodné trénerské sympózium v ľadovom hokeji. [Goalkeeper training and cooperation of coaches. Zurich: International coaching symposium in ice hockey. In Slovak.].

Pavliš, Z., Perič, T., & Novák, Z. (2000). *Příručka pro trenéry ledního hokeje II. část., Příprava na ledě*. [Handbook for ice hockey coaches II. part., Preparation on ice. In Czech.]. Praha, Czechia: Český svaz ledního hokeje.

Perič, T. (2002). *Lední hokej*. [Ice Hockey. In Czech.]. Praha, Czechia: Grada Publishing.

Ripoll, H. (1991). The understanding–acting process in sport: The relationship between semantic and sensorimotor visual function. *International Journal of Sport Psychology*, 22, 221-243.

Savelsbergh, G. J. P., Williams A. M., van der Kamp, J., & Ward, P. (2002).Visual search, anticipation and expertise in soccer goalkeepers. *Journal of Sports Sciences*, 20, 279-287.

Williams, A. M., Huys, R., Cañal-Bruland, R., & Hagemann, N. (2009). The dynamical information underpinning anticipation skill. *Human Movement Science*, 28, 362-370.

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