	INDEX				
Sr.	Research Subject	Pg. No.			
	Editorial				
1	Reality and Factors Affecting Extra-Curricularsports Activities of Students in University of Economics, University of Danang: Phan Ngoc Thiet Ke, Nguyen Xuan Hien	1-6			
2	Prospective of a New Invented Core Strength Exercise on LowBack Pain in Hockey Players: Lim Boon Hooi, Teo Eng Wah	7-12			
3	The Use of Corpus-based Approach in Analyzing Linguistic Features of Words in a Particular Context: Theoretical Background and Applications (Special Reference to 'A Corpus-based Study on the Most Frequently-used Medically-relevant Content Words in Human Anatomy'): B. S. Dilrukshi	13-23			
4	Role and Contribution of Kaka Pawar in Wrestling: Chandrakant R. Mhatre, Dr. Pravin Lamkhade	24-28			
5	Virshaivmath of Betmogra in Middle Age as a Common Tenet of Hinduism with Sarvadharmasambhav: Damre Shailaja Shankarra	29-32			
6	Analysis of Skills which are used more Frequently for Attack in Pro Kabaddi League: Mr. Satyawan Balwadkar, Dr. M. R. Gaikwad	33-36			

July 2018

Editorial

Economic Policies A Critical Analysis

Demonetisation a Hard hitting path breaking economic measure hitting out Black Money i,e, Money out of circulation of our economy on which no tax is paid, to stop funding to terrorist to curb terrorism in India ,to introduce supply of currency in in India so that digitalisation shall improve the growth of country at the Centre over demonetisation, etc were widely proclaimed by the Government as objectives behind demonetization time has come to see the fruits.

More than 99% of the currencies banned were redeposited in the banking stream, it is a question of research where the black money had gone? The terrorism in India is still going on, thousands of soldiers killed by terrorists in Kashmir, even BJP disassociated with Kashmir Government recently on Terrorism. The measure widely affected the industries particularly small industries which were affected by the measures and ultimately closed down leading to large scale unemployment, negative manufacturing growth, inflation petrol and fuel price recorded highest growth, telling the people that they cannot have access to the money in their accounts was "nanny-ism carried to an extreme." Demonetisation was an exercise in telling people what notes they could hold... The government telling us that you cannot have access to your own money in your account was nanny-ism carried to an extreme," Digitalisation is very good for curbing the black money but still our country is having large scale illiteracy, unawareness of Digitalisation amongst masses is a big question. We feel this measure is a little bit haste measure horridly taken.

"Intention of GST was a wonderful thing. Having one nation one tax is a great idea but in practice what this government has done, it has created something for the state, the bureaucrats and not to help the people."Instead of one nation one tax, we have been given three taxes, six slabs underneath and 37 forms a year to be filed.. People wonder why fuel is out of GST to control prices is a big question.

"The beef ban in its conception and intention is indeed nanny state behaviour. The government is trying to determine what people put in their mouths, even in their homes...This nanny state has destroyed the livelihoods of millions in Maharashtra alone," the former Union minister said.

Reality and Factors Affecting Extra-Curricularsports Activities of Students in University of Economics, University of Danang

Phan Ngoc Thiet Ke, Nguyen Xuan Hien: Faculty of Physical Education – Danang University, Vietnam

Abstract

By studying the status of awareness and motivation to participate in extra-curricular sports activities of students of the University of Economics - University of Danang, while pointing out the basic factors that affect the sport activities The course is designed to enhance the effectiveness of these activities.

Keywords: Physical education; Extracurricular; Student; University of Economics; University of Danang.

I. Introduction

Extracurricular sports activities have an important role in building physical and mental health for students after long hours of working and studying. Besides, these activities also create a wholesome lifestyle, motivations and inspirations for professional achievement and academic research. This paper explores the real situation of extracurricular sports activities of students of University of Economics – University of Danang, and proposes solutions to improve the effectiveness of these activities. Surveys were conducted among the students currently studying in University of Economics. From the statistics, the factors influencing the extracurricular sports activities of these students were discovered.

II. Research methods

The research methods used are: analyzing and collecting data, surveys and statistics.

III. Results and discussion

3.1 Awareness of extracurricular sports activities of students

To understand and evaluate the awareness of students from University of Economics-University of Danang of sports activities as well as their motivations for physical exercises, surveys were conducted with the participation of 950 students. The questions were asked in order to evaluate the demands and attitudes of students towards practicing physical activities and sports. Besides, their motivations for sports as well as their needs to practice were also assessed from the surveys. The demands for sports activities of students are presented in Table 1.

	Percenta	Percentage (n=950)				entage
Levels	Male	%	Female	%	n = 950	%
	(n=400)		(n=550)			
Willing to practice	215	53,75	306	55,64	521	54,84
Hesitant	175	43,75	209	38		
Not practicing	10	2,5	35	6,36	429	45,16

Table 1: Demands for sports activities of students of University of Economics – University of Danang (n= 950)

The results from Table 1 shows that the demands for practicing sports activities of students are still low (54,84%), whereas 45,16% of participants were still hesitating or not practicing.

From the students' demands for practicing sports activities, the paper continues to investigate their motivations for physical exercises. The results are as follows:

	Motivations for sports activities	Male (n=400)	%	Female (n=550)	%	Overall (n=950)	%
1	Love for sports	41	10,25	45	8,18	86	9,05
2	Practicing to pass PE class	111	27,75	209	38	320	33,68
3	Improving physical strength	73	18,25	65	11,82	138	14,53
4	Meeting and socializing	105	26,25	124	22,55	229	24,12
5	Getting good shape	70	17,5	107	19,45	177	18,63

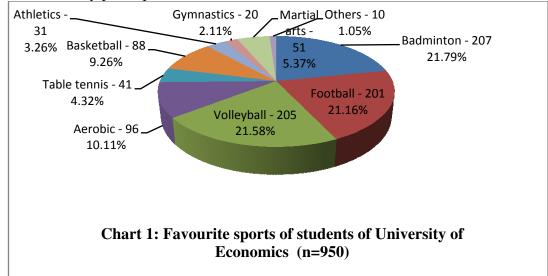
 Table 2: Motivations for sports activities of students of University of Economics-University of Danang (n=950)

Table 2 reveals that the motivations for sports activities of these students are quite diverse: 33,68% of these students practice sports to pass their PE exams; 24,12% students see these activities as opportunities to meet new people and socialize; 18,63% students aim to have good shapes; and 14,53% students want to improve their physical strength. Only 9,05% practice based on their love for sports.

The statistics reflect the reality and characteristics of University of Economics – University of Danang with a higher number of female students. The students would like to take part in sports activities to meet new people and make new friends, while the female students are afraid of physical activities, consequently practice only to pass their exams.

From the results, the paper continues to explore the favourite sports of these students. The results are shown in Chart 1:

The results on Chart 1 identify the favourite sports of these students, including badminton (21.79%), volleyball (21.58%), football (21.16%), aerobics (10,11%), and other sports with quite low percentages. This can be partly because the students have to practice a large amount of athletics and PE during their studies. In addition, these sports tend to be less attractive for many participants.



The times and duration of sports activities of the students are important indicators in developing extracurricular sports activities in the university and are also the foundation of physical development among the students. The results are presented in Table 3:

	Frequency (per week)	Male (n=400)	%	Female (n=550)	%	Overall (n=950)	%
1	More than 5 times	40	10	36	6,55	76	8
2	3-4 times	78	19,5	85	15,45	163	17,16
3	1-2 times	199	49,75	331	60,18	530	55,79
4	No fixed times	83	20,75	98	17,82	181	19,05

Table 3: Frequency of students' practicing sports activities (per week)

Accordingly, the number of students practicing sports only 1 or 2 times per week or with no fixed times take up to 70%, which proves that the involvement of physical exercises among the students of University of Economics is still very low.

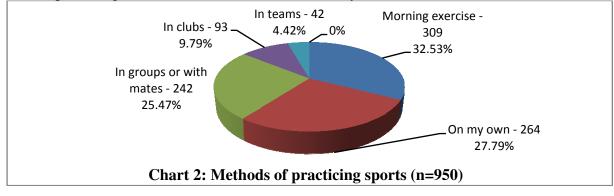
As for the locations for their sports activities, the results are displayed in Table 4:

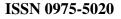
	Locations		Results	
			n = 950	%
1	Free sports areas on campus	36	8	38,74
2	Paid facilities on campus	75		7,89
3	Different areas on campus	24	4	25,68
4	Paid facilities off campus	58		6,11
5	Free sports areas off campus	20	5	21,58

Table 4: Locations for practicing sports activities by students (n=950)

From Table 4, it can be noticed that students practicing in free sports areas on campus take up to 38,74%, in paid facilities on campus 8,89%, in different areas on campus 25,68%, at paid facilities outside campus 6,11% and at free sports areas outside school 21,58%. The results coincide with the characteristics and lifestyle of the students; they mainly choose the free activities on campus, due to efficiency and their budget. Only a small percentage of students actually pay for their sports activities, which proves that their budget is limited and their investmentin physical exercises is still inadequate.

Their methods of practicing are presented in Chart 2. Due to difficulty and limit in areas and courts, the students normally choose to do exercises in the morning (32,53%), on their own (27,79%), in groups or with their classmates (25,47%). Other methods such as practicing in clubs or teams are least chosen by the students.





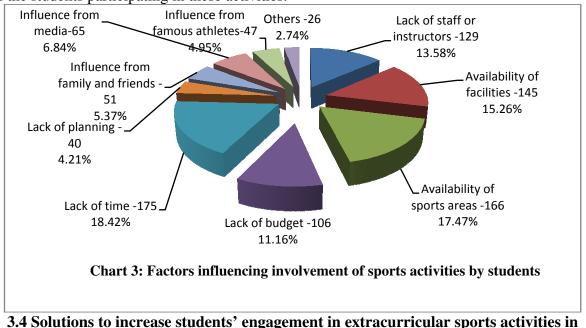
From the results, it can be concluded that the extracurricular sports activities are still not popular among the students, although every year the Youth Union and Student Association always initiate and organize sports competitions in the university, such as football, badminton, volleyball etc. Besides, each Faculty has their own competitions to create an environment for students to socialize and entertain after their hard-working hours. However, these activities are still not appealing to the majority of the students.

3.2 Factors influencing extracurricular sports activities of students

The study reveals that there are subjective and objective factors influencing extracurricular sports activities involvement of the students of University of Economics – University of Danang.

Subjective factors: The main subjective factors affecting extracurricular sports activities of students are their demands and motivations. From the surveys on 950 students, it can be noted that only 54,85% students are willing to practice, whereas 33,68% students only exercise in order to pass their exam. Therefore, it seems like the students are still not aware of the importance of practicing sports and its role in their physical and mental health. This is the biggest factor influencing the involvement of sports activities.

Objective factors: From the results in Chart 3, the factors determining the involvement in physical activities of students are lack of time (18,42%), which is due to their study schedule and part-time jobs; availability of sports areas (17,47%), and the availability of facilities (15,26%). Next are the lack of staff or instructors (13,58%) and lack of budget (11,16%). This explains why 38,74% choose to practice in free sports areas on campus for their own convenience and low budget. Hence, investment on facilities and sports activities of the students should be taken into consideration by the school management board. Moreover, there are other objective factors making an impact on students' extracurricular activities such as: influence from the media, influence from family and friends, influence from famous athletes etc. Consequently, the students choose the kinds that they like, and slowly improve their performance in PE class. At some levels, these factors also influence on the enthusiasm of the students participating in these activities.



3.4 Solutions to increase students' engagement in extracurricular sports activities in University of Economics – University of Danang ISSN 0975-5020

From the findings of the research, the paper suggests two groups of solutions suitable for the situations of the university, which are as follows:

Group solution 1: The University should put a focus on raising the awareness about the importance role of sports among the students, in order for them to understand the values and significance of practicing sports in wholesome personal development. As a result, the students will engage in physical exercises more proactively to improve their wellbeing and build a healthy lifestyle. There should be strong collaborations among different Faculties, Departments and Associations such as the Administration Department, Students Service, Youth Association.. in organizing educational courses to raise the awareness of the students. It is also necessary to encourage and emphasize the responsibilities of the young generations to improve their health, develop their physical strength, practice daily exercise routine, build their dignity and morality, and develop a healthy lifestyle. The University should organize contests to celebrate Vietnamese Sports Day 27/3, contest of "Study and Exercise following the example of Ho Chi Minh"..., propagandize using news and photos of sports activities on the communications channels of the University and its Faculties such as newsletters, websites etc in order to encourage and motivate students' engagement.

Group solution 2: It is suggested that the University diversify sports activities and develop sports clubs depending on the students' demands and availability of facilities. The clubs are instructed by PE staff, Youth Association, Student Association and run weekly according to general rules of the clubs, from which the students will be more motivated to pursue different sports of their choice. In addition, there should be an emphasis on sports activities development, planning and organizing annual competitions on the levels of Faculties and University. From that, the students will participate more in practicing and competitions, at the same time the talented students can be found and recruited to the University's teams. The University should have rewarding policies to individuals and groups with high achievements in the sports activities organized by the school. There should also be friendly competitions with the other universities and professional competitions to increase the rankings of University of Economics – University of Danang.

IV. Conclusion

The paper has shown that the current awareness of students of demands and motivations for extracurricular sports activities in University of Economics – University of Danang is still low. 54,84% students answered they are willing to practice, whereas up to 33,68% students only exercise in order to pass the exam. This is the biggest subjective factor influence their engagement in physical exercises.

The extracurricular sports activities of the students are not yet frequent, or have not been a habit of many students. Many objective factors such as lack of time, availability of sports areas and facilities.. are the main causes of this reality.

To improve the quality of extracurricular sports activities of the students, the paper has proposed two group solutions based on the status quo of the University.

References

- Dr. Do Vinh, MS. Nguyen Duc Thanh (2010), "Reality of extracurricular activities of students in Universities in Ho Chi Minh City" – Research on Planning Physical Education, School Medicine, Sports Publisher, Hanoi.
- [2] MS. Nguyen Quang Huy (2010), "Reality of extracurricular sports activities of students in Military Technical Academy" – Research on Planning Physical Education, School Medicine, Sports Publisher, Hanoi.
- [3] Nguyen Toan, Pham Danh Ton (2000) Reasoning and Methods in Physical Education, Sports Publisher, Hanoi.
- [4] Duong Nghiep Chi (1983), Measuring sports, Sports Publisher, Hanoi.

* * *

7

Prospective of a New Invented Core Strength Exercise on LowBack Pain in Hockey Players

Lim Boon Hooi PhD & Teo Eng Wah, PhD : University of Malaya, Malaysia

Introduction

The game of field hockey is the world's second most played team sport after soccer and is played in 132 countries around the world(Sherker&Cassell, 2002). Over the last 20year hockey has developed into a fastpaced game that requires sprinting within restricted areas of play with rapid stop-start actions and sudden changes in direction. At a high level of competition, hockey is a fast game involving long periods of hard physical work. Each player must be able to hit the ball with strength and accuracy, since dribbling, flicking, pushing and trapping of balls require not only skill, but also considerable muscular strength and endurance.

During training, a flexed position of the thoraco-Iumbar spine may be adopted for the greater part of a two-hour session. Repetitive cyclic loading of the spine into flexion may predispose toward low back pain (LBP) (Twomey& Taylor 1987). This factor is independent of other injurious aspects of the game such as running, twisting, stretching, awkward falling or direct injury, any of which may be causes of LBP. All these actions place considerable strain on the joints of the lower limbs (Naicker et al., 2007).Further, this position has been shown to produce excessive spinal loading when compared to non-crouched positions and may place the athlete at increased risk of back injury (McGill, 2002).

LBP has been identified as a significant health problem for field hockey players (Haydt, Pheasant, & Lawrence, 2012). Two separate studies have shown that more than 50% of field hockey players suffered from LBP (Haydt et al., 2012; Murtaugh, 2001) with at least 12% missing practices or games due to pain (Murtaugh, 2001). Field hockey requires all players (exception of the goalie) to spend a considerable portion of the 70 min game in a semi-crouched position with significant lumbar spinal flexion and rotation(Murtaugh, 2001). Most back pain in field hockey players has no identifiable source or is considered non-specific in nature; as evidenced by 94% of female field hockey players suffering from LBP identifying no specific inciting event in the onset of their LBP (Haydt et al., 2012).

The reported lifetime prevalence of LBP in field hockey players was 72.3%. The 12month, 3-month and point prevalence of LBP were 64.5%, 44.0% and 27.8%. Results indicate a high prevalence of LBP in German field hockey players. reported lifetime prevalence of LBP of 54% in field hockey players. Reilly et al. (1990) and Haydt et al. (2012) also found lower lifetime prevalence of LBP (53% and 56%). A possible reason for the higher prevalence could be the high performance level and the associated high training loads. The results underline the necessity of specific prevention programs for LBP in elite field hockey players.

LBP is reported the fifth most common reason for all physician visits in the United States (Deyo et al.,2006). Based on reported results among skeletal injuries, LBP is the most rampant one (60-80%). The chance of getting a LBP among athletes is 1-30% (Bradley and Wiesel, 2008). In activities that backbone is involved, high pressure, twisting and turning could cause ache in lower parts of backbone (Quinn, 1996).

Specialists believe that most the pain in elite athletes in backbone and lower parts is caused by LBP (Jonasson et al.,2011) and in different sport it depends on intensity of training sessions (Lawrence et al., 2006).Jonasson et al. (2011) studied the prevalence of pain in lower

parts of the body and in the back bone and found out that pain in the back bone is rampant among Hockey players. Results of Lawrence et al. (2006) also show that elite athletes have a higher chance of suffering LBP. The intensity of LBP is reported to be between 8-74%, and this difference is because in students of teen ages, LBP is affected by several factors like: age, gender, social and economic situation, mental and personal characteristics and heredity (Schwebel et al.,2009).

Injuries of lower back can occur in many difference tissues around the lower back. Muscle strains (tears) can result from overstretching or fatigue. Ligaments, can be sprained when joints are pushed beyond their limits. The joints themselves can be traumatised, particularly by sudden twisting movements. The discs, they can be sprained due to twisting or bending, overloaded by compression. They are particularly vulnerable in hockey players, because sustained bending & twisting loads are the actions most likely to injure the discs of the lower lumbar spine (Figure 1). Training the muscles that constitute the anatomical corehas been suggested in the prevention (McGill, 2010) and treatment (McGill, 2002) of LBP.

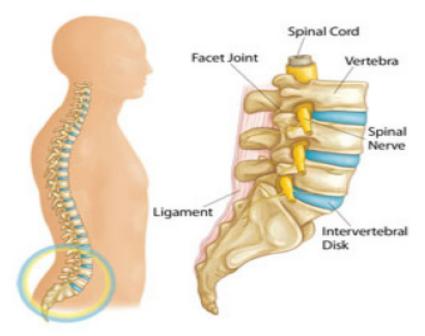


Figure 1: Lumbo-pelvic Region

Core Strength Exercise

Exercise program that aims to strengthen muscle groups in lumbo-pelvic area and the deep muscles that are responsible for stabilizing spine, and done by athlete's own body weight is called core strength training (Takanati, 2012). More than a decade ago, several authors proposedthat core strength training was essential for athleticperformance and injury prevention (Kibler et al., 2006). Their theories werebased mainly on studies dealing with LBP patients. The arguments and recommendationsfrom these studies were promptly accepted and adopted by the fitness industry(Willardson, 2005). Most authors generally incorporate the trunk into the core definition, with special emphasis on the lumbo-pelvic region of the body (Willardson, 2005).

The core strength trainingplays an important role in reducing and preventing lower and knee joint injuries (Zazulak et al., 2007). In recent years, core strength training is widely used in improving performance (Schilling et al., 2013), reducing the risk of injuries in

athletes, increasing physical fitness in healthy individuals (Sekendiz et al., 2010), and rehabilitation of patients with a LBP (Marshall &Murphy, 2006). Weak trunk extensor muscles may be a risk factor for LBP (Lee et al., 1999). The core has been described as a muscular corset with the abdominals in the front, erector spinae and gluteals in the back, the diaphragm as the roof, and the pelvic floor and hip girdle musculature in the bottom (Akuthota et al., 2008).

Schilling et al. (2013) showed that core strength and endurance training program two times per week for six weeks led to significant enhancements in 3 different core endurance tests (back extensor endurance, flexor endurance, and lateral musculature endurance) in ten untrained college students.

The core is the most imperative segment of the body in regards to human movement. Most functional movements within the body originate at the core; therefore, most movements of the ankle and lower leg begin at the core. If the core is efficient, it may allow for optimal performance at all peripheral joints of the body, including the ankle mortise (Delecluse, 1997). The core is defined as the limbo-pelvic hip complex, it is where our centre of gravity is located and where the movements of the body originate.

An efficient core allows for optimal acceleration, deceleration and stabilization of the entire kinetic chain during functional exercise. The core needs to be trained appropriately in order to efficiently distribute weight, absorb force, and transfer ground reaction forces during functional movements.

Core muscle strength is an important prerequisite for all athletes. The core was described as an anatomical box consisting of 29 pairs of muscles (Diagram 1 & 2) forming a front (abdominals), back (paraspinals and gluteals), top (diaphragm), and bottom (pelvic floor and hip girdle) (Richardson et al., 2000).

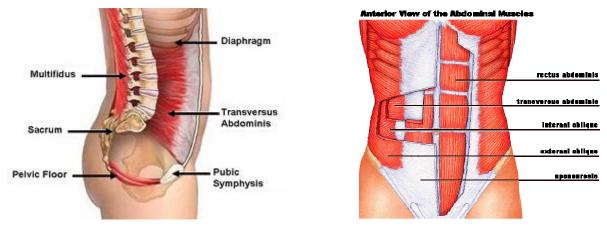


Figure 2: Core Muscles

Figure 3: Core Muscles

The core represents the connection between lower and upper limbs and should be considered as a functional unit in which different muscles interact, even if not located in the thoraco-lumbar region (such as shoulders and pelvic muscles). Exercises involving the full body linkage such as plank exercises or Core Strength Training, have been advocated to enhance the capacity of transmitting force through the body linkage (Schoenfeld et al., 2014).

The core musculature also has been described as both producing and preventing motion (Behm et al., 2010) and only preventing motion (McGill, 2010). Power is never

generated by the core but rather in the hips and then transmitted through a stable or stiffened core (McGill, 2010). Optimal core stability is the ability to control the trunk to allow the greatest transfer of torque to the terminal segments (Kibler et al., 2006). Consequently, the ability to stabilize the anatomical core or preventing motion could have a significant influence on athletic performance by not bending and loosing propulsion, thus encouraging the transfer of torque to the extremities.

In recent years, core strength training is widely used in improving performance (Schilling et al., 2013), reducing the risk of injuries in athletes, increasing physical fitness in healthy individuals (Sekendiz et al., 2010), and rehabilitation of patients with a low back pain (Marshall & Murphy, 2006).

Prospective of ANew Innovation & Registered Intellectual Property (IP) on Core Strength Exercise - 360° TitaniUM Core Strength Exercise®

The New 360° TitaniUM Core Strength Exercise® (Figure 4) is a new sequence of core strength exercise to strengthen the core region muscles. It is easy to remember with no specific equipment needed to carry out this exercise. It is suitable for all athletes and non-athletes. The structured sequence of exercises would enable the practitioners to experience greater efficiency of movement; improved body control and balance; increased power output from both the core musculature and peripheral muscles such as the shoulders, arms and legs; reduced risk of injury and improved overall athletic performance.

Previous findings revealed that core strength exercise benefits on reducing the Lower Back Pain by strengthen the core muscles among athletes, especially in Hockey Players. The 360° TitaniUM Core Strength Exercise® consists of 12 core strength exercises which will strengthened all angles the core region such as pronation, supination, lateral side of the core. The routine of the exercise created enable the practitioners to complete the whole sequence by rotate their body horizontally to the right two rounds. Majority of previous studies only utilized a few core strength exercise for their intervention, this new invention consisted a few range of 12 core strength exercise with all angles, theoretically it should be more effective to induce significance improvement on strength and endurance of the core muscles.

At such, we would like suggest more studies to be carried out on this new invention to verify its effectiveness towards athletes, public and general health. The 360° TitaniUM Core Strength Exercise® book as in Figure 4.



Figure 4: 360° TitaniUM Core Strength Exercise® book

References:

- 1. Akuthota, V., Ferreiro, A., Moore, T., Fredericson, M. (2008). Core stability exercise principles. Curr. Sports Med. Rep. 7 (1), 39e44.
- 2. Behm, D.G., Drinkwater, E.J., Willardson, J.M., Cowley, P.M. (2010). The use of instability to train the core in athletic and nonathletic conditioning. Applied Physiology, Nutrition, and Metabolism 35, 91e108.
- 3. Bradley, G.P., Wiesel, S.W. (2008). Low Back Pain in the Aging Athlete. Sports Med Arthrosc Review.16: 39-46.
- 4. Delecluse, C. (1997). Influence of strength training on sprint running performance. Sports Medicine 24(3): 147-56.
- 5. Deyo, R.A., Mirza, S.K, Martin, B.I. (2006). Back pain prevalence and visit rates estimates from US national surveys, 2002. Spine. 31: 2724 2727.
- 6. Haydt, R., Pheasant, S., & Lawrence, K. (2012). The incidence of low back pain in ncaa division III female field hockey players. International Journal of Sports Physical Therapy, 7(3), 296e305.
- Jonasson, P., Halldin, K., Karlsson, J., Thoreson, O., Hvannberg, J., Swärd, L., &Baranto, A. (2011). Prevalence of joint-related pain in the extremities and spine in five groups of top athletes. Knee Surg Sports TraumatolArthrosc. 19(9): 1540-1556.
- 8. Kibler, W.B., Press, J., Sciascia, A. (2006). The role of core stability in athletic function. Sports Medicine 36, 189e198.
- 9. Lawrence, J.P., Greene, H.S., Grauer, J.N. (2006). Back pain in athletes. American Academy of Orthopaedic Surgeons. 14(13):726-735.
- 10. Lee, J.H., Hoshino, Y., Nakamura, K., Kariya, Y., Saita, K., Ito, K. (1999). Trunk muscle weakness as a risk factor for low back pain: a 5-year prospective study. Spine 24 (1), 54e57.
- 11. Marshall, P.W., Murphy, B.A. (2006). Evaluation of functional and neuromuscular changes after exercise rehabilitation for low back pain using a Swiss ball: a pilot study. J. Manip. Physiol. Ther. 29 (7), 550e560.
- 12. McGill, S. (2002). Low back disorders: evidence-based prevention and rehabilitation. Human Kinetics: Champaign, Il, p. 1-295.
- 13. McGill, S. (2010). Core training: evidence translating to better performance and injury prevention. Strength and Conditioning Journal 32, 33e46.
- 14. Murtaugh, K. (2001). Injury patterns among female field hockey players. Medicine and Science in Sports and Exercise, 33(2), 201e207.
- 15. Naicker, M., Mclean, M., & Esterhuizen, T.M. (2007). Poor peak dorsiflexor torque associated with incidence of ankle injury in elite field female hockey players. Sci Med Sport ;10(6):363-371. [http://dx.doi.org/10.1016/j.jsams.2006.11.007]
- 16. Quinn, S.B. (1996). Influence of saddle type upon the incidence of lower back in equestrian riders. BrJ sport Med. 30 (2): 140-4.
- 17. Reilly, T., & Seaton, A. (1990). Physiological strain unique to field hockey. Journal of Sports Medicine and Physical Fitness, 30(2), 142e146.
- 18. Richardson, C., Jull, P., Hodges, J. (2000). Therapeutic exercise for spinal segmental stabilization in low back pain: scientific basis and clinical approach. *J Can ChiroprAssoc*, 2000; 44: 125.

- 19. Schilling, J.F., Murphy, J.C., Bonney, J.R., Thich, J.L. (2013). Effect of core strength and endurance training on performance in college students: randomized pilot study. J. Bodyw. Mov. Ther. 17 (3), 278e290.
- 20. Schoenfeld, B.J., Contreras, B., Tiryaki-Sonmez, G., Willardson, J.M., Fontana, F. (2014). An electromyographic comparison of a modified version of the plank with a long lever and posterior tilt versus the traditional plank exercise. *Sports Biomech*, 13: 296-306.
- 21. Schwebel, D.C., Pitts, D.D., Stavrinos, D. (2009). The influence of carrying a backpack on college student pedestrian safety. Accid Anal Prev. 41 (2): 352-356.
- 22. Sekendiz, B., Cug, M., Korkusuz, F. (2010). Effects of Swiss-ball core strength training on strength, endurance, flexibility, and balance in sedentary women. J. Strength Cond. Res. 24 (11), 3032e3040.
- 23. Sherker, S., &Cassell, E. (2002). A review of field hockey injuries and countermeasures for prevention.Report 143: Monash University Accident ResearchCentre.
- 24. Takanati, A.(2012). A correlation among core stability, core strength, core power. 3nd kicking velocity in Division II college soccer athletes. YüksekLisanstezi, Graduate Athlethic Training Education, California. Pennsylvania.
- 25. Twomey, L., Taylor. (1987), Physical Therapy of the Low Back, Churchill Livingstone~ New York.
- 26. Wiilardson, J. (2005). Regarding the effectiveness of resistance exercisesperformed on unstable equipment". Response.Strength Cond. J; 27 (4): 11-3
- 27. Zazulak, B.T., Hewett, T.E., Reeves, N.P., Goldberg, B,&Cholewicki, J. (2007). Deficits inneuromuscular control the trunk predict knee injury of risk А prospectivebiomechanical-epidemiologic study. American Journal ofSports Medicine.2007;35(7):1123-1130.

* * *

The Use of Corpus-based Approach in Analyzing Linguistic Features of Words in a Particular Context: Theoretical Background and Applications (Special Reference to 'A Corpusbased Study on the Most Frequently-used Medically-relevant Content Words in Human Anatomy')

B. S. Dilrukshi : Department of English and Linguistics, University of Sri Jayawardenepura, Nugegoda, Sri Lanka.

Abstract

Linguistics which is usually considered as the scientific study of language leads its analysis towards different aspects in a language such as its form, meaning as well as the use in a particular context. According to modern studies on linguistics, corpus-based approach can be seen as a widely-used methodology to make solid analyses on different aspects in a language. Because of the very reason, Corpus Linguistics is considered as one of the main branches in modern linguistics, which has gained an excessive popularity among linguists as well as many other researchers in different fields manifesting its role as the most efficient approach in analyzing language. According to John Sinclair, a corpus is "a collection of pieces of language text in electronic form." Usually a corpus gives access to a lot of findings about a particular language variety or a discipline. This article mainly aims to discuss the theoretical background and applications related to the use of a corpus-based approach in analysing linguistic features of words in a particular context with special reference to one of my researches, 'A Corpus-based Study on the MostFrequently-used Medically-relevant Content Words in Human Anatomy. The aspects of the background of the field of Corpus Linguistics, language and register variation, building a corpus, explanation on the referred research and the applications of corpus linguistics in language analyses have thus been discussed in order to make the reader have a proper idea of the theoretical background of corpora and its applications which can make a linguistic study related to any discipline productive.

Key Words: Linguistics, Corpus, Words, Frequency, Collocation, Language Analysis

1. Introduction

Corpus Linguistics can be considered as one of the most prominent areas in linguistics in modern studies. Partly it can be seen as an area which revolutionizes language teaching as well. There are many reasons for that. Mainly a corpus-based study of a particular language or a subject helps to identify many aspects regarding linguistic features of the words and phrases related to that language or the particular subject. It has the ability to reveal the important aspects of a particular term which will help to get a good understanding of that term and the context where it is used. Therefore it can be seen that a corpus-based study of a particular subject is something really worth for the learners of that subject as well for the researchers who would like to further research on the same area.

Usually, a **corpus** consists of a databank of natural texts, compiled from writing and/or a transcription of recorded speech. The main focus of corpus linguistics can be considered as to

discover patterns of authentic language use through analysis of actual usage. It is said that it does not specifically focus on generating theories of what is possible in the language. Its only concern has been identified as the usage patterns of the empirical data and what is revealed through that about language behavior.

Further, in corpus linguistics, we can see that it often provides a more objective view of language than that of introspection, intuition and anecdotes. John Sinclair (1998) has pointed out that this is because speakers do not have access to the subliminal patterns which run through a language. Thus, as a result, corpus-based studies have gained a prominent role in linguistics and they have been recognized as the most productive source to identify almost any language pattern such as lexical, structural, lexico-grammatical, discourse, phonological and morphological. It also gives access to the findings of very specific agendas; such as discovering male versus female usage of tag questions, children's acquisition of irregular Past Participles, etc.

According to corpus linguistics, it is also important to use the proper analytical tools, and it is said that with use of such carefully chosen analytical tools, an investigator can discover not only the patterns of language use, but the extent to which they are used, and the contextual factors that influence variability as well. For example, an investigator can examine the use of any tense through a corpus-based study with appealing analytical tools, to see how often it is used in speaking versus writing or newspapers versus fiction, or one can even investigate the use of synonyms like "begin" and "start" or "big/large/great" to determine their contextual preferences and frequency distribution. Along with proper analytical tools, there are many other important aspects about which an investigator or a user should know; the aspects such as balance, representativeness, concordance, collocations and several other aspects in corpus linguistics. Thus, corpus-based studies usually require a lot of knowledge in order to make the research or the study meaningful.

According to Barlow (2002), corpus linguistics is specifically considered as a field which can be applied to teaching in a very specific way or in its three realms: syllabus design, materials development and classroom activities. For example, in classroom activities, the teacher can supply the students a deliberately chosen corpus to make their own discoveries about language use. It is a sort of a data-driven learning which can encourage learner autonomy by training students to draw their own conclusions about language use.

As the famous linguist, Biber, D. (2005) says, although people have strong intuitions about language use, usually a corpus-based study shows that our intuitions are often wrong. The same idea is given by McEnery (2006) saying that the language people produce may not represent the typical language although their intuition is correct. Thus, as many of the linguists have suggested, corpus-based studies are the main sources through which we can study the real patterns of language. Thus, it can be realized that corpus linguistics is a field which can offer many productive findings on a particular language or a language variety and contribute a lot for the development of linguistics.

2.1. Word

Linguistically,a **word** can be defined as the smallest element which is usually uttered in isolation along with its semantic (literal meaning) or pragmatic (practical meaning) content When comparing with morphemes which are considered as the smallest unit of meaning, it can be seen that words have the ability to stand on their own, while morphemes do not possess that ability. Furthermore, a word can also be seen as a constituent at the phrase level and above. Sometimes when a word is placed in a hierarchy of grammatical constituents, it is

also placed above the morpheme level and below the phrase level. A word usually possesses several main features such as being the minimal possible unit in a reply, having a regular stress pattern, influenced by phonological changes and being the smallest constituent that can be moved within a sentence while protecting the grammaticality of the sentence.

In the book, *Language: An Introduction to the Study of Speech* by Sapir, Edward (2000), Sapir says, "It is high time that we decided just what is meant by a word. Our first impulse, no doubt, would have been to define the word as the symbolic, linguistic counterpart of a single concept. We now know that such a definition is impossible. In truth it is impossible to define the word from a functional standpoint at all, for the word may be anything from the expression of a single concept—concrete or abstract or purely relational..." (Sapir, E., 2000, p.17)

Further, in linguistics, John Sinclair has said that a word in and of itself does not carry meaning, but that meaning is often made through several words in a sequence (Sinclair, 1991). Krieger, in his article, *Corpus Linguistics: What It Is and How It Can Be Applied to Teaching*, points out to this statement by Sinclair and says that it is the idea that forms the backbone of corpus linguistics. Thus, we can see that the study of words is very important in a research pertaining to the area of corpus linguistics.

2.2. Content Words

In this study, the focus is mainly on the frequently-used content words in Human Anatomy. As it is usually taught in language, there is a categorization of words as content and function words. Content words are known to be nouns, verbs, adjectives, and sometimes adverbs. One important feature that we can notice about the content words is that they are mostly stressed in Spoken English. That means, in spoken context, the most oftenused words are content words rather than function words which are usually considered as auxiliary pronouns, determiners. prepositions and verbs and have verv little substantive meaning. Usually function words denote the grammatical relationships between content words.

Linguistically, content words are also defined as words that name the objects of reality and their qualities. They can usually be about actual living things such as elephant, camel, etc., family members such as father, mother, etc., natural phenomena such as winter, moon, etc., common actions such as do, eat, etc. and characteristics such as cold, kind, etc. Most of the time, content words consist of nouns, but sometimes certain verbs, adjectives and adverbs are also considered as content words.

Classification of content and function words are not that easy and any word definitely belongs to one of the two categories. It is said that with around 150 function words, 99.9% of words in the English language are content words. Thus, it seems that function words are used at an excessively higher rate and make up about 50% of any English text although they are in small in numbers. It is said that this is due to the conventional patterns of words usage: that every time a content word is used, a function word is bound to it. It creates interdependence between the two word groups.

Content words in a language are usually counted as open class words. Thus, new words can be easily added. It is said that in relation to English phonology, a content word should usually be in a minimum length of two light syllables or one heavy syllable; which while function words do not have. Here in this research, the analysis of all the findings are based on the focus given to content words that are found in the discipline of Human Anatomy.

3.1. Language

Generally, "language" is known as a human system of communication. That is the simplest definition that can be given to language. It further says that this system of communication has arbitrary signals in it, such as voice sounds, gestures, and written symbols. In "linguistics", which is called as the study of language, different linguists have defined language in different ways.

"Language is a purely human and non-instinctive method of communicating ideas, emotions and desires by means of voluntarily produced symbols."- Sapir, Edward. *Language: An Introduction to the Study of Speech*. (1921)

From now on I will consider a **language** to be a set (finite or infinite) of sentences, each finite in length and constructed out of a finite set of elements."- Chomsky, Noam. *Syntactic Structures*. (1957)

"A **language** is a system of arbitrary vocal symbols by means of which a social group cooperates."

-Bloch, B. and Trager, G. Outline of Linguistic Analysis. (1947)

For an accurate communication, a language should be organized well and it needs a well-organized system in every level: morphological (words and the formation of words), phonological (sound system), semantic (meaning), syntactic (grammar) and in pragmatic (practical use of language) level as well. Here in this research, the morphological aspect is given the main focus while the aspects of semantics and syntax are also sometimes combined in the analysis through the results of the corpus.

3.2.Register Variation

In any language, register variation is considered to be one of the main aspects which should be studied well. It is said that without corpus analysis, it is difficult to keep track of this. Usually registers consist of varieties of language which are used for different situations, and language can be divided into many registers, depending on the degree of specificity, and each of them shows specific characteristics. Through a corpus analysis, it can be revealed that any language often behaves differently according to the register, each with some unique patterns and rules. Pertaining to this research, the corpus that is compiled, will also be used to analyze the patterns in the language of the discipline Human Anatomy which behaves according to its specific register.

4.1.Corpus

The word "**corpus**", has been derived from the Latin word meaning "body". It might have been used to refer to any text in written or spoken form. The study of corpora has been very popular all over the world since it has opened the access to thousands of new findings in the field of linguistics. In modern linguistics, the term, "corpus" is used to refer to "large collections of texts which represent a sample of a particular variety or use of language(s) that are presented in machine readable form." Usually, computer-readable corpora can consist of *raw* text only; plain text with no additional information.

According to Bowker and Pearson, corpora are "large collections of text in electronic form. They are stored on computers and can be manipulated with the help of software known as corpus analysis tools." (Bowker, L. and Pearson, J., 2002)

As John Sinclair, who is considered as the most famous linguist in the field of Corpus Linguistics, says, "A corpus is a collection of pieces of language text in electronic form, selected according to external criteria to represent, as far as possible, a language or language variety as a source of data for linguistic research." (Sinclair, J. 2005)

Then, among different studies done by different linguists in the world, the ideas presented byBiber, Conrad and Reppenare very important. As it has been stated, according to them, there are four major characteristics in a corpus.

- 1. It is empirical, analyzing the actual patterns of language use in natural texts.
- 2. It utilizes a large and principled collection of natural texts as the basis for analysis.
- 3. It makes extensive use of computers for analysis.
- 4. It depends on both quantitative and qualitative analytical techniques. (Conrad,S., Biber,D. and Reppen,R., 1998, p. 4)

Thus, we see that building a corpus is something that should be done very carefully. At the same time, it is also understand whether a corpus-based study is a method or an approach. Amongst many debates in the world of linguistics, it is mostly accepted that a corpus-based study has much to deal as a method, more than an approach. (Benett, G.R., 2010, p. 7)

When designing a corpus, the aspects of language or language variety, mode, text type, domain, text location, etc. have to be well studies and concerned. The samplingand thebalance are also important factors in building a corpus. It is very important to pay attention to the range of text categories in the corpus. They should be organized texts which has a goodrepresentativeness of the particular language variety or discipline that the corpus is about.

"Representativeness refers to the extent to which a sample includes the full range of variability in population." (Biber, 1993)

Pertaining to the size of the corpus, it is said that there is no maximum size in a corpus and the minimum size of a corpus depends on the kind of query (whether the corpus is searching for the frequent words or technical terms, etc.) and the methodology used for studying the data. According to Zipf's law, half of the words in a corpus is said to occur once only and a quarter, twice only, etc. If the study is set to find the collocations of a certain language variety or a discipline, then the size of a corpus requires being bigger while the corpora designed for specialized studies can be smaller.

When referring to a corpus, the most specific information such as the frequency, collocation, concordance, concordance plot, word list and word clusters should also be studied well since the understanding of such aspects in corpus linguistics are essential in analysing data.

4.2. Types of Corpora

There are different kinds of corpora. They usually contain written or spoken (transcribed) language, modern or old texts, texts from one language or several languages, etc. The texts in a corpus can be whole books, newspapers, journals, speeches, etc., or they may consist of extracts of varying length. These kinds of texts included in a corpus and the combination of those different texts vary between different corpora and corpus types. Corpora are known to serve as the basis for a number of research tasks in the field of Corpus Linguistics.

Usually, **General Corpora** consist of general texts; texts that do not belong to a single text type, subject field, or register. The British National Corpus (BNC) and the Michigan Corpus of Academic Spoken English (MICAS) are good examples for a general corpus. There are also corpora that contain texts chosen from a particular variety of a language. For example, they can be from a particular dialect or from a particular subject area. These corpora are usually called **Sublanguage Corpora**.

There are also corpora which can consist of texts in one language or language variety

only or of texts in more than one language. A corpus that consists of the texts that are the same in all languages as in translations, is called a Parallel Corpus while a corpus of a collection of "similar" text is called a Comparable Corpus.

Other than these common types of corpora, there are also some other types such as Reference corpus which consists of large, spoken and written texts representing various social and situational strata, Monitor corpus which are considered to be growing regularly while reflecting language changes, **Balanced corpus** which are balanced according to the text type, genre, or domain, Sampled corpus which is a finite collection of carefully selected texts, Annotated corpus which are enhanced with various types of linguistics information and Unannotated (Raw) corpus which contains only plain texts with no additional linguistic information

In this research, the corpus belongs to the category of **Specialized Corpora** since it is on one particular area of a discipline which is Human Anatomy. This kind of corpora helps the user to search on how the specialized language is used in the so-called discipline. Further, it also consists the features of a Balanced Corpus and Sampled Corpus, since it has been designed balancing the discipline of Human Anatomy using carefully chosen text books.

4.3. Building a Corpus

As it can be realized through this whole study on Corpus Linguistics, building a corpus requires a lot of knowledge on the subject area. Before building a corpus, through the knowledge of all the aspects regarding Corpus Linguistics, a designed plan is necessary to proceed with a corpus-based study. Pertaining to the research, A Corpus-based Study on the Most Frequently-used Medically-relevant Content Words in Human Anatomy', the corpus designing was done like this.

Size	205088 words
Number of Texts	55
Subjects	Human Anatomy (Pure and Clinical)
Text Type	Academic texts used in Medical Faculties
Authorship	Ellis, H. and Mahadevan, V. and Sinnatamby, C.H.
Language	English
Publication Date	16 th March 2017

 Table 1: Design of the Corpus – Corpus on the Most Frequently-used Medically relevant Content Words in Human Anatomy'

When building a corpus, the balance and representativeness are two main factors that the compiler has to pay attention on. In the compilation of this corpus both those factors along with the content of the discipline were carefully studied in order to avoid repetition of the same content and produce an accurate result.

The corpus analysis software AntConc (http://www.antlab.sci.waseda.ac.jp/software.html) was used as the research instrument for the corpus. This software has been designed as a freeware corpus analysis toolkit for concordancing and text analysis. Selecting an approprate corpus analysis software is also important since it should be done according to the type of the research and its objectives. Thusit can be understood that there are certain principles and methodologies that a complier should follow when building the corpus. Hence, it is very important to consider every aspect of Corpus Linguistics before doing a corpus-based study.

July 2018

5. 1. The Research, A Corpus-based Study on the Most Frequently-used Medicallyrelevant Content Words in Human Anatomy'

This research mainly focuses on the compilation of a corpus to identify the most frequently-used medically relevant content words in Human Anatomy and analyse the linguistic patterns with related to the contexts in the particular discipline in order to further investigate on how words can function in a particular discipline or a language variety with different linguistic patterns. For this research, as the study area or the discipline, one of the most widely-used disciplines in Medicine, Human Anatomy was selected since it appears to be a compulsory subject area that must be studied by any medical student and thus becomes useful for a majority in an academic context, too, and as the research sample, two main text books that are prescribed for Human Anatomy were selected while balancing the whole scope of the discipline pertaining to the two main branches of Human Anatomy, Pure and Clinical. The compilation of the corpus was done with the assistance of the corpus analysis software, AntConc aligning with the objectives of the resaerch. The size of the corpus is 205088 words within which 10593 words have been identified as the words that usually occur in Human Anatomy. Covering the selected parts from the text books, the corpus consists of fifty-five texts in computerized format. Since the main objective of this research was to identify the most frequently-used medically relevant content words in Human Anatomy, a frequency test was done on the word list produced by the corpus.

Accordingly, the words with their rank are given in order in the research and ultimately, collocation tests have been done in order to find out the words that associate with the most frequently-used words. Through the access to this corpus, it is convenient for any student or researcher to get a good understanding about the words in the discipline of Human Anatomy as well as the patterns of language, making it a useful resource in linguistics.

5.2. An Explanation to Findings

With reference to the above corpus, it could be seen that out of 205,088 words used in the scope of Human Anatomy, 10593 words appear as the words which are usually used in the discipline. Among those 10593 words, it could be observed that the most frequently-used words are not the content words, but the function words such as the articles or determiners, "the", prepositions, "of" and auxiliary verbs, "is." In any language variety, especially in a variety of a written texts, the occurrence of functional words are more than the occurrence of content words since it is through the functional words that the content words are bound with each other. Thus, taking only the content words into consideration, it could be noticed that for each 1000 words in Human Anatomy, approximately there are about 700 medically relevant content words appearing within the scope. Hence, for the whole 10593 words that are there in the discipline, there are around 7000 medically relevant content words and that is a percentage of 66% within the whole scope of Human Anatomy.

Through the tests done on the frequency and collocations, many significant facts regarding the language use in Human Anatomy could be revealed; such as the most frequently-used and the least-occurred noun in the discipline, the words which usually associate with particular words, instances where the generalized notions of nouns and verbs change, etc.. Through the access to the corpus, more words with their frequency can be identified online and many conclusions can be made on their frequency and patterns of language as it has been done in the analysis of this research.

6. The Use of Corpus-based Approach in Language Analyses: Applications

Analyzing a language in a particular context is not that much easy and it takes time to go through a manual process pertaining to that. Another fact is that the representation of the actual usage of language should also be there and the accurate results should be gained according to the representation of proper data. The assistance of a corpus here plays an active role since it is a trusted source where the analysis can be done with a solid background of the language created by the corpus where it becomes easy to identify the patterns clearly.

Pertaining to the research, A Corpus-based Study on the Most Frequently-used Medicallyrelevant Content Words in Human Anatomy', it could be seen that a corpus should be built after studying every aspect of Corpus Linguistics and then a proper design should be there. From the selection of the sample up to the compilation of the corpus, each stage should be thoroughly focused that then only the representativeness and the balance of the complied corpus can be trusted as a productive source to have access to different linguistic patterns in a particular discipline.

When taking into consideration the facts revealed through the tests done on the frequency and collocations pertaining to the above research, many facts regarding the language use in Human Anatomy could be revealed. The research manually shows the frequently-used medically relevant content words of the first 1000 words in Human Anatomy and through that, the identification of the most frequently-used words can be easily done, and through such identifications, the users can come to conclusions such as considering the word, "nerve" as the most-frequently occurred medically relevant content word in Human Anatomy.According to the following chart of frequency taken from the analysis of the research (Only pertaining to the first twenty-five words in the first thousand content words in the discipline), the content words with the highest frequency can be identified as ranging from the word "nerves" up to the content word with the lowest frequency within the given first thousand frequently-used words in Human Anatomy, that is "reflexes" according to the research. A corpus once it is compiled is able to give every word included in the particular discipline as it is shown through this research.

Table 2: The Most Frequently-used Content Words in the First Thousand Words in Human Anatomy (Example from the First Twenty-Five Words)

R-Rank, F-Frequency, W-Word

(Total Number of W	ord Types: 10593, Total Nu	mber of Word Tokens: 205088)	

R	F	W
12	1362	nerve
18	843	posterior
19	834	anterior
20	826	part
26	872	lateral
23	793	artery
28	700	fibres
33	600	upper
36	551	medial
37	536	lower
38	511	inferior

39	510	bone
40	506	surface
41	503	superior
44	487	side
46	477	vein
47	454	muscle
50	412	branches
51	408	muscles
54	374	internal
77	281	cells
79	275	border
80	270	small
81	267	spinal
82	264	vessels

Applying collocation tests to find out the associated words with a particular word is another useful aspect with regard to corpora. When referring to the aspect of collocations in the above corpus, the usual words that associate with some of the most frequently-used content words can be identified very clearly and quickly, and many conclusions can be made on the patterns that occur between those collocations such as identifying some words in a different word class when comparing to the common use of those words in other fields. The word, "flow" is a good example for such instances; that although it is commonly used as a verb in other fields, it is often used as a noun in Human Anatomy.

"towards the heart; when <u>blood flow</u>reverses, the valves dilate during increased <u>blood flow</u>. The sheath is In this way, by reflux <u>blood flow</u> through these largely venous system. Reverse <u>blood flow</u> in this system Anterior cerebral artery of <u>blood flow</u>between"

Through the above concordance lines taken through the corpus, it is clear how the word, "flow" is often used as a noun in Human Anatomy and when considering the whole cluster of "blood flow", it can be seen that different words such as temporal adverbs like "when", common verbs like "increased" and more words like "reverse", both in the form of a noun and a verb, precede and occur after it. The word "supply" is also another example where a word which usually functions as a verb most frequently in the general context, occurs frequently as a noun in a particular discipline. Thus, through a corpus it can be realized that generalized notions regarding words can be different in actual usage with regard to some disciplines.

A good corpus always provides the users with such easy and quick access to various findings. More findings are possible with the corpus and the aforesaid collocation tests manifest the productivity of it further: that any medical student who has the access to the corpus can get a list of associated words related to any word in Human Anatomy that he or she might prefer. Usually, even a practiced doctor or a professor in the field of Human Anatomy might not be able to memorize all the words that associate with one particular word. That is another significant feature that we can notice about corpora through these findings:

that they even possess the ability to have access to areas even which are really difficult to memorize and present.

Furthermore, when applying the features in a corpus to find out linguistic patterns in a particular language variety or a discipline, more options are there to use such as clusters, concordance and key word list through which the user can identify various aspects of language use. The usage of the corpus thus extends its range in a variety of language patterns as well as in teaching and learning process. Thus, the application of corpora in studies pertaining to linguistic aspects can be considered as the most efficient way to figure out the actual usage of the particular language variety or discipline successfully.

7. Conclusion

As far as it is considered in the world of linguistics, the branch of Corpus Linguistics has gained much attention from the academia and many other fields. The reason might be the unlimited advantages that a corpus offers to any field without being only limited to linguistics. In many fields such as Medicine, Psychology, Education, Statistics, Economy and Politics, the assistance of Corpus Linguistics has been stabilized since it has opened the way to many new findings in various areas. Especially in an area like Medicine, the use of corpora can be a great help since it can identify the patterns of Medical language and develop it pertaining to each discipline in Medicine as it can be seen through the referred corpus-based research as well. The theoretical background to Corpus Linguistics along with the proper application of corpora should be there in order to reach the expected goal of a research pertaining to linguistics or to use the corpus-based knowledge in a different field. Usage of corpora often becomes assistance to get more accurate as well as successful results pertaining to a particular discipline or a language variety since the features in a corpus helps identifying almost every aspect pertaining to language. Thus, the use of corpus-based approach can be seen as one of the most productive approaches to in terms of analyzing linguistic features of words in a particular context.

References

- 1. Adolphs, S., Brown, Carter, R., Crawford, P., &Sahota, O. (2004). *Applying corpus linguistics in a health care context: Journal of Applied Linguistics*.
- 2. Atkinson, Dwight. (1992). *The evolution of medical research writing from 1735 to 1985: the case of the Edinburgh Medical Journal.*
- 3. Baker, P. (2009) *Contemporary Corpus Linguistics*. London: Continuum International Publishing Group.
- 4. Bennett, G. R. (2010). Introduction to Corpus Linguistics: Part 1. Using Corpora in the Language Learning Classroom: Corpus Linguistics for Teachers.Michigan ELT.<<u>http://www.press.umich.edu/titleDetailDesc.do?id=371534</u>>
- 5. Biber, D. and Conrad, S. (2009). *Register, Genre and Style*. New York: Cambridge University Press.
- 6. Biber, D., Conrad, S. and Reppen, R. (1998). *Corpus Linguistics: Investigating Language Structure and Use*. New York: Cambridge University Press.
- 7. Biber, D. (1995). *Dimensions of Register Variation*. New York: Cambridge University Press.
- 8. Biber, D. and Federica B. (2007). *Lexical bundles in university spoken andwritten registers*. *English for Specific Purposes*.

- 9. Biber, D. and James K. J. (2005). *Corpus Linguistics and Linguistic Theory, Merging corpus linguistic and discourse analytic research goals: discourse units in biology research articles.*
- 10. Bloch, B. and Trager, G (1947) *Outline of Linguistic Analysis*. Linguistic Society of America: Waverly Press.
- 11. Bowker, L., Pearson, J. (2002). Working with Specialized Language: A Practical Guide to Using Corpora. London: Routledge.
- 12. Conrad, S. Investigating academic texts with corpus-based techniques: anexample from biology. 1996.
- 13. Crossley, S. (2007). *A chronotopic approach to genre analysis: an exploratory study*. English for Specific Purposes.
- 14. Crystal, D. (2001). Language and the Internet. Cambridge: Cambridge University Press.
- 15. Donmei, Wang. Applying corpus Linguistics in Discourse Analysis.
- 16. <cscanada.net/index.php/sll/article/download/j.sll.1923156320130602.4002/4121>
- 17. Eckert, Penelope, and Rickford John R. (eds.). (2002). *Style and sociolinguistic variation*. Cambridge: Cambridge University Press.
- 18. Flowerdew, J. (ed.). (2002). .Academic discourse. Harlow: Longman.
- 19. Finegan, E. and Douglas B. (1994). Register and social dialect variation: an integrated approach.
- 20. Friedmann, N., Grodzinsky, Y. *Brain and Language* 56,397-425, Article No. BL971795. 1997.
- 21. Halliday, M.A.K. and Hasan, R. (1976) Cohesion in English. London: Longman.
- 22. Herring, Susan C. (ed.). (1996). Computer-mediated communication: linguistic, social and
- 23. cross-cultural perspectives. Amsterdam and Philadelphia: John Benjamins.
- 24. Hunston, S. (2002). Corpora in Applied Linguistics. Cambridge University Press.
- 25. Krieger, Daniel. Corpus Linguistics: What It Is and How It Can Be Applied to Teaching.
- 26. <Iteslj.org > Articles > Krieger-Corpus>
- 27. Leech, Geoffrey N. and Nicholas Smith.(2006). *Recent grammatical change in written English 1961–1992.In the changing face of corpus linguistics*, ed. by A. Renouf and A. Kehoe. Amsterdam: Rodopi.
- 28. McEnery, J., Wilson, A. (2001). *Corpus Linguistics* (2nded.). Edinburgh: Edinburgh University Press.
- 29. McEnery, J., Xiao, R., Tono, Y. (2006). *Corpus-based Language Studies: an advanced resource book*. London: Routledge.
- 30. Miscin, Evelina. Use of Corpus Analysis Tools in Medical Corpus Processing.
- 31. <infoz.ffzg.hr/.../5-01%20Miscin,%20Use%20of%20Corpus%20Analysis%20Tools.pd...>
- 32. Nelson, M. (2010). Building a written Corpus: What are the basics?
- 33. Newman, J., Baayen, H., and Rice, S. (eds.) 2011. *Corpus-based Studies in Language Use, Language Learning and Language Documentation*. Amsterdam: Rodopi Press.
- 34. Chomsky, Noam. (1957). Syntactic Structures. The Hague: Mouton.
- 35. Ozdemir, N. O. Using corpus Data to Teach Collocation in Medical English.
- 36. <pops.uclan.ac.uk > Home > Vol 3, No 1 > ÔnderÔzdemir>
- Popscu, T. (1918). College Essay Writing, A Corpus-based Analysis. University of Alba Iulia.

Role and Contribution of Kaka Pawar in Wrestling

Chandrakant R. Mhatre: Research Scholar, RTM Nagpur University, Nagpur **Dr. Pravin Lamkhade:** Director of Sports, Rani Indirabai Bhosle College, Kuhi Nagpur

Abstract

Wining laurels at international sports arena has become a prestige issue and every nation tries to produce top class sportsmen for international competitions. For this, they conduct researches systematically to identify factors that help in achieving levels of skills and fitness to attain top performance. The same importance in research seems to be insignificant in Wrestling. The researcher has much respect about contribution and achievement of Shri Kaka Pawar in Indian wrestling. This investigation may focus much light upon his wrestling activity. The investigator has adopted the historical-cum-biographical approach including interview technique – a case study. The opinionnaire ensures the sufficient reliability (r=0.78, p<0.01) and content validity. Logical analysis of each statement of interview was done and interpreted. The external and internal criticisms of the documents (primary and secondary sources) were followed to interpret the results. The result appears that he belonged to a middle class family and his family tradition as well as culture inspired him to choose this event. Thus, Shri Kaka Pawar's childhood environment helped him to become a world class wrestler. While analyzing the data on his personality, it is evident that instead of arousal of tension during wrestling competition, he used to keep his mind cool. This is the turning point for him to get success in achieving medals in different wrestling competitions. Shri Kaka Pawar has enormous zeal and competency to face and cross tough competitions worldwide. Although he suffers due to paucity of financial support during the tenure of competitions, but his enthusiasm, effortful practice, punctuality, self-discipline, self-respect, respect to coach as well as parents and in-built inspiration have led him to become world class wrestler. The life sketch of Shri Kaka Pawar, without doubt, inspires to imbibe and enhance sports culture in India. So it is suggested that similar study may be conducted on other eminent personalities in Physical Education and Sports.

Key words: Wrestling, Contribution and Role

Introduction

In this modern era of competition, the psychological preparation of a team is as much important as teaching the different skills of game on the scientific lines. The teams are prepared not only to play the games, but also to win the games. And for winning the games, it is not only the proficiency in the skills, which bring victory, but more important is the spirit of the players, with which they play and perform their best in the competition.¹

Wrestling is an ideal sport to prepare men for combat duty. It has an equal value for any young man in developing his physical powers and extensive psychological benefits, which can be derived from competition in this fine art of sport. Today, in fact, wining laurels

¹N. Whitehead. (1975). Conditioningfor Sports, West Yorkshire: E. P. Publishing Ltd, p.26.

at international sports arena has become a prestige issue and every nation tries to produce top class sportsmen for international competitions. For this, they conduct researches systematically to identify factors that help in achieving levels of skills and fitness to attain top performance. The same importance in research seems to be insignificant in Wrestling. It is quite natural that we must know about the practices and techniques used by wrestlers to achieve success. The researcher has been very much fascinated by the personality of Shri Kaka Pawar. The researcher has much respect about contribution and achievement of Shri Kaka Pawar in Indian wrestling. It is with this objective in view that the present researcher has selected this eminent wrestler for research. Since he is like a beacon light to the young wrestlers in Maharashtra, this investigation may focus much light upon his wrestling activity. In fact, no proper records regarding achievement and the present study, therefore, has been undertaken entitled "Role and Contribution of Mr. Kaka Pawar in Wrestling – A Case Study."

This piece of research was, therefore, has been undertaken with the following objectives:

- To study Shri Kaka Pawar's childhood, family background, educational background, nature, behavior and hobbies.
- To study Kaka Pawar's sporting career like his entry in the sport, growth of his wrestling career.
- To study Kaka Pawar's practice methodology like style and technique of wrestling as well as training methods like physical training, psychological / mental training, weight training, personal training and dietary practices.
- To study Kaka Pawar's participation in state, national, international level competitions, awards and achievements in the field of Wrestling.
- > To study role of coach and mentor of Kaka Pawar in achieving success.
- To study Kaka Pawar's contribution for the development of wrestling game and other sports in India.

Method

Procedures

In order to collect the necessary data pertaining to the present study, the investigator has adopted the historical-cum-biographical approach including interview technique. To investigate the role and contribution of Shri Kaka Pawar towards the promotion of wrestling in Maharashtra, a case study.

Sources of data

The primary source of data was Shri Kaka Pawar, who is a living legend of Indian wrestling, whereas the secondary sources of data were his family, disciple wrestlers, friends, and coaches who witnessed some phases of his life and contributions in wrestling.

Data Analysis

Interview

The dimension-wise questions (close-type) were asked to Shri Kaka Pawar during interview. The detailed dimensions were as follows:

Sr. No.	Dimension
Ι	Childhood, family, socio-economical, cultural and educational backgrounds.
II	Contribution as a Wrestler, Coach and Scholar.
III	Personality and professional experience.
IV	Wrestling Career, Training, Role of his coach, Competitions, Achievement as a wrestler.
V	Support received from family, friends, coach, society & government.
VI	Vision and other information.

According to the above mentioned dimensions, all the 35 questions were framed on close-type basis, which were reduced to 30 in consultation with experts and research guide, and during interview these open-type questions were asked to Shri Kaka Pawar. However, while interviewing with his wife some open-type questions were asked. There was no specific time limit to their responses that were recorded with electronic media. The researcher contacted Shri Kaka Pawar with a systematic approach so that he was favourable to give accurate and reliable information. As this was a novel piece of research work, Kaka Pawarvoluntarily accepted to give information; this indicates that the data gathered seem to be highly authentic. Kaka Pawar's wife also showed keen interest in the theme of this research. She was enthusiastic and found very well understood about the purpose of the study and also allowed the researcher to take the interview with some open-type questions. The greater response given by Shri Kaka Pawar and his wife has inspired the researcher to proceed for the interview. The focus of the interview with Shri Kaka Pawar was mainly around the questions on above referred dimensions, but the questions were exclusively close-type, but with his wife the questions were open-type.

Primary sources were the authentic documents -

- Official records
- Personal records
- Certificates awarded
- Pictorial records

The primary sources were eye-witnessed evidences.2

Secondary sources were the semi-authentic documents -

- Published material
- Interview with family members of Kaka Pawar
- Unpublished materials

²John. W. Best & J. V. Kahn. (2003). *Research in Education*, (9th Edition), New Delhi: Person Prentice Hall, p.101.

Opinionnaire

After due consultation with the guide, the investigator prepared an outline of information about the Opinionnaire and after finalization this was administered on the close associates (relatives, friends, students, coaches, and officials) of Shri Kaka Pawar. However, for preparation of the Opinionnaire, the researcher consulted different literature to determine the dimensions representing the opinionnaire.

Dimension-I: Shri Kaka Pawar as a player Dimension-II: Shri Kaka Pawar as a coach Dimension-III: Shri Kaka Pawar's Personality and professional experience. Dimension-IV: Shri Kaka Pawar as a scholar

Methods for analyzing data

The data received from interview, verification of documents (primary and secondary sources) and opinionnaire were processed for analysis. Logical analysis of each statement of interview was done and interpreted. The external and internal criticisms of the documents (primary and secondary sources) were followed to interpret the results. And percentage-wise analysis was considered for the data obtained from the opinionnaire. The gathered data about Shri Kaka Pawar were classified and interpretation was done accordingly.

Results

- 1. The result appears that he belonged to a middle class family and his family tradition as well as culture inspired him to choose this event. Thus, Shri Kaka Pawar's childhood environment helped him to become a world class wrestler. Although he got minimal education formally, he received a full support from his family, friends and society that might have helped him to get success.
- 2. While analyzing the data on his personality, it is evident that instead of arousal of tension during wrestling competition, he used to keep his mind cool. This is the turning point for him to get success in achieving medals in different wrestling competitions. This is really a great lesson we learnt from his personality.
- 3. The documents / certificates about his achievement in wrestling were found original and they revealed that a wrestler like Shri Kaka Pawar has enormous zeal and competency to face and cross tough competitions worldwide.
- 4. Shri Kaka Pawar had received proper guidance from coach so that he becomes a hard worker. His punctuality, training, practice, diet etc helped him to improve his wrestling career. Although he suffers due to paucity of financial support during the tenure of competitions, but his enthusiasm, effortful practice, punctuality, self-discipline, self-respect, respect to coach as well as parents and in-built inspiration have led him to become world class wrestler. After retirement from this sport, apart from his own achievement, his contribution in preparing upcoming wrestlers is appreciated.

5. The result of cross-validation (through opinionnaire) of the above personality and achievement of Shri Kaka Pawar was found true. This helps to interpret that Shri Kaka pawar and his wife were very practical like down to earth in life situation and they have not exaggerated the facts as expressed during the interview.

Conclusion

Although he suffers due to paucity of financial support during the tenure of competitions, but his enthusiasm, effortful practice, punctuality, self-discipline, self-respect, respect to coach as well as parents and in-built inspiration have led him to become world class wrestler. apart from his own achievement, his contribution in preparing upcoming wrestlers

needs appreciation. The cross-validation (through opinionnaire) indicates that the above personality and achievement of Shri Kaka Pawar are found true. This also infers that Shri Kaka Pawar and his wife were very practical like down to earth in life situation and never take opportunity of exaggerating the facts.

Recommendation

- This study recommends that the youth of middle class family can also take inspiration from the life sketch of Shri Kaka Pawar to become not only a wrestler but also can engage any sports event as a career. The parents of such motivated youth are also requested to re-visit the biography of Shri Kaka Pawar so that they can inspire their child to involve in sports from childhood and should support them to flourish.
- This study recommends that, every athlete should keep cool instead of arousal of various tensions before and during competitions. This is really a great lesson we learnt from his personality. Moreover, like Shri Kaka Pawar, every athlete must develop an enormous zeal and competency to face tough competitions worldwide.
- The upcoming athletes are suggested to receive proper guidance from coach and must develop a sense of punctuality, regular training and reasonable practice and proper diet and rest etc Along with this they must imbibe the quality of truthfulness, sincere, self-discipline, self-respect, admiration to coach as well as parents and in-built inspiration might have led him to become world class athlete. Even after retirement from respective sport, they should be inspired to prepare the athletes for future generation. The life sketch of Shri Kaka Pawar, without doubt, inspires to imbibe and enhance sports culture in India.

References

- 1. Eysench, H. J. (1947). Dimensions of personality. London: Rutledge.
- 2. John. W. Best & Kahn, J. V. (2003). *Research in Education*, (9th Edition), New Delhi: Person Prentice Hall, p.101.
- 3. Kamlesh, M. L. (1983). *Psychology of physical education and sports*. New Delhi: P.V. Gupta Publications.
- 4. Koul, Lokesh. (1984). *Methodology of educational research*. Shimla: Vikas Publishing House Pvt. Ltd.
- 5. Singh, A. (2008). Sports psychology: A study of Indian sportsmen. New Delhi: Friends Publication.

* * *

Virshaivmath of Betmogra in Middle Age as a Common Tenet of Hinduism with Sarvadharmasambhav

Damre Shailaja Shankarra: Research Scholar in History, S.R.T.M. University, Nanded

Abstract

In the recent times all, Dharma's truths are equal to or harmonious with each other. It means, it has taken as all regions are the same, that all religions are merely different paths to god or the same spiritual goal. Based on this logic the religions path that one takes in life is a matter of personal preference, like choosing whether to eat rice or chapattis to fill one's stomach. The important thing is to follow a path. Any path is as good as any other. The religions of one's birth is not only as good as any other but it is the closet to access and easiest to understand whatever it may happen to be. The best example of it is the place Betmogra. It is known as a place of worship but we all know it a Virshaivmath of Middle age for Serva Dharma Sama Bhav of Hinduism.

The creation of human being is a done taking in to consideration that it is social animal. The human when born he starts crying and when he is going to die also prefers to cry, but when he was alone also cries. It has only one reality, the one who has proper knowledge and blessing power of teachers, which saves us in the journey of crying during our life. It helps us survive against crying in our life. India right from ancient to modern Indian worship teachers and for teacher student is the most important. Number of Temples and Mathas helps us protect our Indian culture with goodness & moral function.

Key words : Virshaivmath, Betmogra, Servadharma Sama Bhav, Math (Servadharma Sama Bhav : Brotherhood relation among all religionpeople)

In the recent times all, Dharma's truths are equal to or harmonious with each other. It means, it has taken as all regions are the same, that all religions are merely different paths to god or the same spiritual goal.

Based on this logic the religions path that one takes in life is a matter of personal preference, like choosing whether to eat rice or chapattis to fill one's stomach. The important thing is to follow a path. Any path is as good as any other. The religions of one's birth is not only as good as any other but it is the closet to access and easiest to understand whatever it may happen to be. The best example of it is the place Betmogra. It is known as a place of worship but we all know it a Virshaivmath of Middle age for Serva Dharma Sama Bhav of Hinduism.

The creation of human being is a done taking in to consideration that it is social animal. The human when born he starts crying and when he is going to die also prefers to cry, but when he was alone also cries. It has only one reality, the one who has proper knowledge and blessing power of teachers, which saves us in the journey of crying during our life. It helps us survive against crying in our life.

In India right from ancient to modern Indian worship teachers and for teacher student

is the most important. Number of Temples and Mathas helps us protect our Indian culture with goodness & moral function.

In our social Indian life different types of cultures, castes, religions are together involved. Different aspects of each religion pray, worship, inculcation in temples and religiousness is most important individual part of Marathi Indian people.

In India Christian Church, Budha's Vihar, Vasai in Jainis, Muslim Mosques & Math word from Sanskrit is most important for Virshaiv people. Math is the place which is constructed by Sayanshi Guru for people who prefers to take the knowledge from their own religious teachers, who helps them for the satisfaction in life. So "Math" is most important place which we may say as Kuti, Vihar, Mahavidyalaya, religious center and Gurukul. Hence in India for the same purpose "Math" is also said to be the best place of Ancient Indian traditional centre. In India Maths are the places in ancient India used for Vedpathan, Shlok, Devarchan & Dhyan etc. It has a reference of the Budha Charitra.

Today's mathas are the most important work and contribution of Adhyay Shankaracharya who started their ancient math in 8th century in India. He was the only person who started establishment of the Mathas all over India for their works and devotion Math started Mathagnay Religious book written in shlok and guided for prayer to religious person to do any moral religious and good work in life with development is possible only with this math. Hence Math is the most important centre for religious knowledge implementation. It also helps us Yoga, Morning Prayer of school with social commitment work only possible with this Math.

Math also helps us for lectures like shlok delivering school gardening, written contribution Shlok for awareness. All administration of Math is run by Acharya Division with strict and pure religiousness in contribution. The social purpose with unity and sociology, religious thirst and dream fulfillment if only possible with this Temples & Maths in those days. Hence in Ancient India the period of Chalukya, Rashtrakut, Yadav society is possible to do great contribution with success in Maharashtra with administrative power.

Similar to this, during this period the powerful social person like Virshaiv, Shaiv, Shakt, Saur and Ganpathya Community with powerful administration played the most important role. Similar to this Jain and Budhhas spread their religion with religiousness and the existence of the Nath, Mahanubhav, Lingayat Varkari religions we also see.

The Shaive religions identification in sculpture with the hands of Shankaracharya's contribution to spread religious attitude is possible in Dwarka by Sharda, in Jagannath Puri by Govardhan, Badrinath by Joshi and Karnataka by Shrangri hence establishment of Math is possible to Shankaracharya in all over India.

Lingayat community also started to establish such type of religious attitude in Math. Another name of Lingayat in Virshaiv. It means it prefers to wear Ling. Hence it is called as Lingayat. The reference of it is referred in 12th century by Mahatma Basweshwar by giving proper position to this religion.

He also says "Sidhant Shikhmani" the most important religious book which gives most important contributions for their community's religiousness.

The most important principles in this religion are 1) Astavaran. 2) Panchachar 3)

Shatsal. In Lingayat Guru, Math, Virakt Math and Sharan math are three types of Math in it.. Hence, there are Guru Class Kedar, Kashi, Srisshailya, Ujjaini and Rambhapuri are five types of Panchacharya Peeth.

But Virakt people give more importance to Basveshwar Allamprabhu for their central place for pure moralness.

In Nanded district nine types of Maths gives us Virshaiva Peeth. The Ujjain Peeth is in Mukhed, Betmogra, Hadgaon and Nagthana. The Math of Rambhapuri is in Hanegaon, Mudkhed & Tamlur. Similarly, kashipeeth is in Shiradhon. Kedarpeeth is in Kasarali. Rambhapuri is in Ahmadpur & Srishailyapeeth is in Ausa. Virshaiv Math is divided into two Maths, Virakt Math and Guru Math. In ancient times society has given land for these Maths.

But today that lands profit is used by Math for poor student's education and helpless people to survive.

Betmogra is a small village in the Nanded district near Devgiri hills. There is a Math. In that Math in the bottom place there are twelve Jyotirling with state of lord shiva establishment similar to this, there is a Samadhi of 11th Guru of Math.

Similarly, on the upper side of that building there is a justice court building. We also see there is middle age history of ancient heritage with ancient Jamra Path, Nani Sanda, Vatanpatre and hand writing sculpture.

In the state of Maharashtra, Andhra Pradesh & Karnataka there are 13 branches of Shiv Sampradayik Math where established in ancient period.

In the period of Mughals during year 1656 the Guru of Betmogra Math Shivling Swami was awarded with King Award Badshah given by Aurangzeb. The whole power of village of Betmogra and 16th village Jamrapath had given to the Betmogra Math. Hence in the Math we see Nizam Kalin Sadan, middle age Nani and Virgalache structure and middle age swords. Hence the Nani of Betmogra we also see in Shivpur.

In the way we may see the Muslim Kings respect with award to Shivling Swami Helped to impress their friendship. So on one side we see Shivling Swami and on the other side we see Muslim Badshah as a Hindu Muslim friendship.

So this friendship helped both of them to place Chand in Math, Panja, Don Kajwe, Don Swarya and Kalas to put in Math with positive thinking, but this positive thinking of both helped them to make unity among the society of Muslim and Hindu community. It helped both of them to celebrate their festivals together and with happiness and love in present Betmogra Math.

This traditional festival friendship celebration among both Muslim and Hindu is celebrated till today with harmonious relationship. The 27th area land of Betmogra Math helps all the profit for the welfare of whole society of Hindu & Muslims. They also started Gaushala for cows of that region and village. We may also see the Nizam Chandulal Sanada in the Math.

To conclude this we came to that conclusion today Betmogra is that place with that Math we stopped the conflict between Hindus & Muslims with harmoniousness only with the Shivling Badshah Math of Betmogra. Hence it is today's need to protect Indian Culture with Sarva Dharma Samabhav to respect each other for every religion is only possible with this

Betmogra Math. So in India especially in Maharashtra we have to go more publicity to this Betmogra Math for study and for research.

Contemplation inculcation among the students of SRTMU Nanded. With this massage of Mathadhipati Shri Sadguru Siddyal Swami also requested all of to visit once to this Betmogra Math so that we will improve broad point of view.

References

- 1. P.P.108, Siddyal Maharaj, Shiv Mahim published by Nilesh Murg, Nanded-2017, Page 3-4.
- 2. Joshi Laxman Shastri, Marathi Vishwakosh (Khand 12), Mumbai-1985
- 3. Tripathi Triveni, Hindu Math, P.28
- 4. Pathak Arun Chandra : Marathwada A K Shodh, Sumeru Prakashan, Dombivali, 2009, P.91,92.
- 5. Altekar A.S., Education in Ancient India, Manohar Prakashan, Varanasi 1975, P.106.

* * *

Analysis of Skills which are used more Frequently for Attack in Pro Kabaddi League

Mr. Satyawan Balwadkar: Research Scholar, Department of Physical Education, Savitribai Phule University, Pune

Dr. M. R. Gaikwad: Research Guide, Department of Physical Education, Savitribai Phule University, Pune

Abstract

Kabaddi is a popular contact sport in Southern Asia that first originated in Ancient India.Kabaddi became more popular in India and abroad after the beginning of Pro Kabaddi League. Pro Kabaddi League took Kabaddi on next level by converting the game to be played as league sport where players nationally and internationally are brought together.Changes in the rules of the kabaddi game in Pro Kabaddi League, had increased the popularity of the game. Also there are much more changes in the skill executed and strategies of the teams. Hence objective this study was to understand which skill are used more for attack in Pro Kabaddi League.

Methodology:

In Pro Kabaddi League (2016 season), in each team there were 25 players hence 200 players of 8 teams participating in this competition were the sample for this study.

Result: It is seen that there are total 2432 raids done in this season of Pro Kabaddi League. Out of those, 1205 (50%) are successful raids, 152 (6%) are unsuccessful raids and 1075 (45%) are nil raid means no point is earned in these raids. Total 17 skills were preferably attempted by the Raiders of all teams. Running Hand touch skill and Bonus skill is attempted maximally by the raiders viz 539 and 457 and the percent of points that raiders have earned points with this skill is 21% and 22% respectively.

Key Points: Pro Kabaddi League, Raid, Bonus, Hand Touch

Introduction:

Kabaddi is a popular contact sport in Southern Asia that first originated in Ancient India. It is played across the country and is the official game in the states of Punjab, Tamil Nadu, Bihar, Telangana and Maharashtra. Outside of India it is a popular activity in Iran, is the national game of Bangladesh and is also one of the national sports of Nepal where it is taught in all state schools. Kabaddi is also popular in other parts of the world where there are Indian and Pakistani communities such as in the United Kingdom where the sport is governed by the England Kabaddi Federation UK.

There are many regional variations of the game of Kabaddi in India, including Sanjeevani, Gaminee, Punjabi and Amar versions, all of which have slightly different interpretations of the game and its rules. There are also other games very similar to Kabaddi in both India and other countries that may not be pure Kabaddi, they are very closely related. These include the game of Hadudu that is played in Bangladesh, the Maldives' Baibalaa and Maharashtra's Hututu.

The governing body for Kabaddi is the International Kabaddi Federation and consists of over 30 national associations and oversees the game and its rules across the world.

To understand the game of Kabaddi is very simple. It is a seven a side game where one player from one side chants "kabaddi...kabaddi..kabaddi.." and enter's the opposition's half and tries to touch at least one player of the opposition so that he can go back to his own half safely. On the other hand, all of the seven players tries to stop that opposition player to go back to his half safely by trying to grab him and keep him under their control till he loses his breath. If a player touches the opposition player and returns to his half safely then not only the player whom he has touched is out but he can make a player alive from his own side who had been out before him, just in case.

Pro Kabaddi League Pro Kabaddi League is an initiative of Mashal Sports to take Kabaddi on next level by converting the game to be played as league sport where players nationally and internationally are brought together.

It was inaugurated in 2014 and played between 8 franchises, representing cities of India under the management of Mashal Sports. After season 2 it became bi-annual.

Changes in the rules of the kabaddi game in Pro Kabaddi League, had increased the popularity of the game. Also there are much more changes in the skill executed and strategies of the teams. Hence this study was undertaken to understand which skill are used more for attack in Pro Kabaddi League?

Objective:

- To find out the skills used more frequently for attack in Pro Kabaddi League
- To find out the skills used successfully in Pro Kabaddi League

Review of Related Literature

Parihar, P. studied the Impact of celebrity ownership of Pro Kabaddi teams on interest levels in the sports. Kabaddi, being an ancient yet an upcoming sport with a lot of enthusiasm from the current generation has spiked interest from a lot of researchers to publish research papers. The paper that follows is an example of one such research paper. As it has just come into the eyes of researches a lot of it yet undiscovered and thus making it a hot topic among researchers. This paper speaks about how celebrity ownership creates an impact on how people view kabaddi as a game or as a mode of entertainment. Survey methodology seems as one of the best option to get people's views about this topic as our topic is according to the general masses and their opinion over the topic.

Kumar, R. studied the Perspective of Youth towards Kabaddi in India. Kabaddi is a contact sport that originated in the Indian subcontinent. It is the national game of Bangladesh, and Nepal and also the state game of the Indian states of Tamil Nadu, Maharashtra, Bihar, Andhra Pradesh, Telangana and Punjab. India is the most successful team in the world stage having won every world cup and Asian Games titles so far. Kabaddi initially became famous in Punjab Region as it was part of their per martial tradition and is popular throughout South Asia and has spread to Southeast Asia, Japan and Iran. As the game is gaining popularity in the world population, systematic studies are needed to select the player, to train up them, to manage their stress and to augment their individual and group performances. The author has tried to sort out the perspective of youngsters towards Kabaddi in India through this manuscript.

Methodology:

This research was done with descriptive survey research method.

Sampling:

Population: All the matches of Pro Kabaddi League were recorded for this study. Hence all 8 teams participating in 60 matches during this season were the population for this study.

Sample: In Pro Kabaddi League (2016 season), in each team there were 25 players hence 200 players of 8 teams participating in this competition were the sample for this study.

Statistics & Conclusions:

Table No 1 Stat	tistics of total raids attempted			
	Total	Raids		
Attempt	2432			
Success	1205	50%		
Unsuccess	152	6%		
Nil	1075	44%		

It is seen that there are total 2432 raids done in this season of Pro Kabaddi League. Out of those, 1205 (50%) are successful raids, 152 (6%) are unsuccessful raids and 1075 (45%) are nil raid means no point is earned in these raids. Hence it is said that either point is earned in the raid or raider came back safe.

Sr. No.		Attempt	Success	Unsuccess	Nil
1	Running Hand Touch	539(22%)	252(21%)	42(28%)	245(23%)
2	Sideways Hand Touch	329(14%)	146(12%)	17(11%)	166(15%)
3	Hand Touch Phanat	304(13%)	141(12%)	11(7%)	152(14%)
4	Side Kicking	130(5%)	43(4%)	12(8%)	75(7%)
5	Back Kicking	79 (3%)	16(1%)	11(7%)	52 (5%)
6	Running RoundKicking	102(4%)	26(2%)	8(5%)	68(6%)
7	Kicking Thrust	15(1%)	4(0%)	3(2%)	8(1%)
8	Squats (Baithi) Side	117(5%)	57(5%)	6(4%)	54(5%)
9	Squats (Baithi) Frontside Back	10(0%)	2(0%)	1(1%)	7(1%)
10	Squats (Baithi) Running	106(4%)	42(3%)	2(1%)	62 (6%)
11	Leg	9(0%)	9(1%)	0	0
12	Jump	12(0%)	9(1%)	3(2%)	0
13	Bonus	457(19%)	262(22%)	12(8%)	183(17%)
14	Cutting	166(7%)	145(12%)	18(12%)	3(0%)
15	Dubaki	23(1%)	17(1%)	6(4%)	0
16	Press	32(1%)	32(3%)	0	0
17	Dash	2(0%)	2(0%)	0	0
	Total Raids	2432 (100%)	1205 (100%)	152 (100%)	1075 (100%)

Table No 2 Statistics of skills used d	during raids in the competition
--	---------------------------------

Total 17 skills were preferably attempted by the Raiders of all teams namely Running Hand Touch, Sideways Hand Touch, Hand Touch Phanat, Side Kicking, Back Kicking, Running Round Kicking, Kicking Thrust, Squats (Baithi) Side, Squats (Baithi) Frontside Back, Squats (Baithi) Running, Leg ,Jump, Bonus, Cutting, Dubaki, Press, Dash.

Running Handtouch skill and Bonus skill is attempted maximally by the raiders viz 539 and 457 and the percent of points that raiders have earned points with this skill is 21% and 22% respectively. Other than these sideways hand touch (12%), Phanat (12%), and cutting (12%), are the skill with which raiders earned the points

References:

- 1. Best, J. W. and Khan, J. V. (1995). Research in education (7th edition). New Delhi:
- 2. Prentice Hall.
- 3. Gay, L. R. (2000). Educational Research:competencies for analysis and application
- 4. (6th ed.). New Delhi: Prentice Hall.
- 5. Morrow, J. R. (2000). Measurement & Evaluation in Human Performance (2 ed.). USA:Human Kinetics.
- 6. http://www.kabaddiiskf.com/history.him.
- 7. http://www.prokabaddileagues.in/p/blog-page_84.html
- 8. http://www.rulesofsport.com/sports/kabaddi.html
- 9. http://sportycious.com/introduction-kabaddi-91452

* * *