EVALUATION OF THE UNIVERSITY SPORT SERVICES FOR INTERNATIONAL

STUDENTS: A CASE STUDY FROM THE UNIVERSITY OF JYVÄSKYLÄ

Yang Liu & Dan Ma

University of Jyväskylä Department of Sport Sciences Master Thesis Sport Planning and Administration Autumn 2007

ACKNOWLEDGEMENTS

After almost two years of studying in the Master Program of Sport Science and Management, Department of Sport Sciences, University of Jyväskylä, Finland, finally we finished all courses and present this study as our master thesis.

We wish to express our gratitude to the supervisors of our master thesis, Dr. Anna-Katriina Salmikangas and Dr. Junjie Feng. During the last two years at this international master program of Department of Sport Sciences, we have received enormous support from you. Your encouragement and expertise have been of great value at all stages of this study, especially your patient and wise instruction for us finishing this master thesis.

We are grateful to our tutor as well as one of our best Finnish friends, Mr. Juha Tuominen, for your enthusiastic and generous help to look through this thesis and check the language. We will never forget your kindness for helping us at the beginning of our living in Finland and during our two years of study.

We want to acknowledge Ms. Anneli Mörä-Leino, Ms. Elina Isännäinen, Mr. Bela Pavelka and Ms. Eileen McEvoy, without your help, we could not have finished this study. Also we want to thank all the international students who have been respondents in our study. Your participation made this study possible.

Last but not least, our deepest appreciation goes to our families, thank you for your consistent support both economic and emotional. With your support and understanding, we trust indeed that we can make more progress in our future studies and life in general.

UNIVERSITY OF JYVÄSKYLÄ

Department of Sport Sciences/Faculty of Sport and Health Sciences

LIU, YANG & MA, DAN:

EVALUATION OF THE UNIVERSITY SPORT SERVICES FOR INTERNATIONAL STUDENTS: A CASE STUDY FROM THE UNIVERSITY OF JYVÄSKYLÄ

ABSTRACT

Master thesis, 85 pages, 16 Appendix pages Sport Planning and Administration 2007

The main purpose of this study is to evaluate the university sport services for international students of the University of Jyväskylä (JYU), and offer suggestions to improve the university sport services in the future. Meanwhile, the study investigates the current status of sport participation of international students at JYU.

The theoretical background in this study is based on the utilization focused evaluation, management of sport services and services quality scale. The study is carried out by mainly using qualitative method to evaluate the sport services through interviewing six international students, the coordinator of university sport office, the foreign student advisor of international office and an active sport events organizer. Additionally, in order to get the background information about the sport participation of international students at JYU, quantitative research is conducted by using a questionnaire (N=206). The main finding of this study is to evaluate the current university sport services for international students as well as provide valuable information about the status of sport participation of international students at JYU.

JYU has offered very good sport services and most of international students are quite satisfied with the current situation. Nearly seventy percent of international students at JYU did sports/exercises and 84.5% of them were familiar with the university sport services/program. Nevertheless, language barrier, lack of information, unawareness of possibilities and other difficulties and problems exist in current sport services.

To improve the sport services of JYU, the university sport office should consider increasing the use of English as a language of instruction, enhancing the promotion of sport program and designing more events and activities for international students.

Key words: Sport Participation, Evaluation, University Sport, Sport Services, Service Quality, International Students

CONTENT

ACKNOWLEDGEMENTS	2
ABSTRACT	3
INTRODUCTION	6
1 SPORTS FOR INTERNATIONAL STUDENTS AT JYU	8
1.1 University of Jyväskylä	8
1.2 International students at JYU	8
1.3 Sport in JYU	10
1.3.1 Sports organized by University Sport Office	10
1.3.2 Sports organized by student union	11
1.3.3 Sports organized by other organizations and clubs	12
2 PURPOSE OF THE STUDY	13
3 THEORETICAL FRAMEWORK	14
3.1 Evaluation	14
3.1.1 The utilisation focused evaluation	15
3.1.2 Program evaluation in service system	15
3.2 Management of sport service	16
3.2.1 Sport service	16
3.2.2 Service quality and customer satisfaction	17
3.2.3 Managing and evaluating service quality	18
3.3 SERVQUAL scale	19
4 IMPLEMENTATION OF THE STUDY	23
4.1 Research Design	23
4.2 Methods of data collection and analysis	26
4.2.1 Questionnaire	26
4.2.2 Interview	30
5 SPORT PARTICIPATION OF INTERNATIONAL STUDENTS AT JYU	34
5.1 Attitude towards sports and exercises	34
5.2 Importance of sport services for choosing university	35
5.3 Sport participation	37
5.4 Factors influencing physical activity	38
6 ANALYSES OF SPORT SERVICES OF JYU	41
6.1 Appearance of supporting resource	41
6.1.1 Facilities	41
6.1.2 Equipment	44

6.1.3 Personnel	47
6.1.4 Organization of sport activities	48
6.1.5 Communication material	51
6.2 Reliability of information	56
6.2.1 Time	57
6.2.2 Location	57
6.3 Effectiveness of response	58
6.3.1 Sport office	58
6.3.2 Instructor	59
6.4 Assurance of implementation	60
6.4.1 Sport office	60
6.4.2 Instructors	60
6.5 Individual attention	62
6.5.1 Individual sport services	62
6.5.2 Personal instruction	63
7 CONCLUSIONS AND SUGGESTIONS	65
REFERENCES	67
APPENDIX	70
Appendix 1 Sport facilities of JYU	70
Appendix 2 Sport Program of JYU	72
Appendix 3 Questionnaire	75
Appendix 4 Questions of interview	80

INTRODUCTION

In the University of Jyväskylä (JYU), as a multi-disciplinary and international university, there are almost 16000 students from 70 different countries. The aim of enrolment as regards to international students at JYU is to double the current amount by 2010, which is also the strategy of Ministry of Finnish Education. One important way to attract more international students is by improving the service quality of the university and JYU aims at improving the service quality in many aspects, including the sport services.

The physical activities and sports play an important role in people's everyday life. On the university campus, most sport services are offered for students. In University of Jyväskylä, sport services, are offered to all students and they are also an important factor, which affects the international students' every day lives. Furthermore, good sport services are also essential to attract more international students to study to the University of Jyväskylä.

Historically, annual report regarding the sport services is written by university sport office at the end of each semester. However, those reports, which are in Finnish, only concern the evaluation and feedback of Finnish students. Although the amount of international students of JYU keeps increasing, there has not yet been any evaluation of university sport services for international students and investigation of their sport participation. The purpose of this study is to investigate the current situation of sport participation among international students and evaluate sport services of University of Jyväskylä for the first time, which should present valuable information for improving sport services.

The thesis consists of four different parts. The first part includes the background of sports for international students at JYU and the purpose of this study. Since this research is a case study with sport services for international students of JYU, the starting part is

the background information about the University of Jyväskylä, the sport services and international students in JYU. The purpose of this study was shown in the following part.

The second part focuses on the theoretical framework and the implementation of this study. First reviews about program evaluation, management in sport services and Service Quality (SERVQUAL) scale which are used as theoretical framework are presented. And then the following chapter introduces to the reader how this research is carried out and what kinds of research methods are used in this study.

The third and the most important part of this thesis focuses on the analysis of the results from questionnaires and interviews by using both quantitative and qualitative research methods to investigate the sport participation of international students at JYU and evaluate the sport services for them through the five different aspects. In addition, possible interpretation of the results is also provided according to the theoretical and practical analyzing. Finally, in the last part, conclusions and suggestions are presented.

1 SPORTS FOR INTERNATIONAL STUDENTS AT JYU

In this chapter, the basic information of University of Jyväskylä and international students in that university are introduced first. Then the topic changes to the current university sport services offered in JYU. The last part describes the situation of international students involved in sports at JYU based on the questionnaire.

1.1 University of Jyväskylä

The University of Jyväskylä (JYU) is a university in Jyväskylä, Finland. It has its origins in the first Finnish-speaking teacher training college, founded in 1863. The college evolved into College of Education in 1937, at which time it was given the authority to grant doctorate degrees. In the 1960s, the college started teaching and researching in the sciences and was subsequently renamed as University of Jyväskylä (Wikipedia 2007).

The university, which is currently divided into seven faculties and each is active in research and provides undergraduate and graduate degree programs in more than one subject, is the second largest university in the country. JYU has 16000 students enrolled in the degree programs in addition to adult education students, representing 40000 students in total. Each year about two thousand new students are accepted and generally only one of seven applicants is accepted, which makes JYU one of the most popular universities in Finland (University of Jyväskylä 2007).

1.2 International students at JYU

In University of Jyväskylä, internationality has always played an important role. Today, the university actively participates in international development co-operation through exchange of education and expertise as well as its highly popular seat of learning, with applicants from throughout Finland and abroad. Meanwhile, JYU has agreements with some 270 European universities, covering the whole of the European Union. Outside Europe, the university has about 25 active partnerships in the Americas, South and East

Asia, Australia and Africa (International Office of University of Jyväskylä 2007).

There are 16000 students from 70 countries at the University of Jyväskylä, which is one of Finland's leading and most popular institutions of research and education. The university offers a wide range of study programs conducted in English, many of which are unique in Finland. Natural Sciences, Human Sciences, Sport and Health Sciences as well as Teacher Education are the university's areas of special expertise (Study in University of Jyväskylä 2007).

During the last twenty years, internationalization of higher education has been one of the key development areas in Finnish education policy (Savolahti 2001). Therefore, it has been necessary for Finnish institutions of higher education to intensify their efforts to recruit a corresponding number of international exchange students to study in Finland. During recent academic years, the number of international students in JYU has increased continuously. According to the record of international office of JYU, by the end of September 2006 around 700 international students from 70 countries were enrolled in JYU, studying as degree or exchange students. The strategy and aim of JYU for enrolling international students is to attract more international students and double the current number before 2010. One of the ways of increasing the amount of international students is to establish more international master programs in which most or all the studies are taught in English. So far, there are 12 International Master Program (IMP) in JYU. In the next academic year, autumn 2007, the number will increase to 15.

Generally, international students study as degree students (Ph.D. or Master Program students) or exchange students at JYU. For degree students, normally they need two or three years to finish their studies in the university, for Ph.D. students the duration is around four to six years. Most exchange students come from Europe countries and only spend one or two academic semesters in JYU, which means that the average duration of stay is either four to six months or nine to twelve months.

1.3 Sports in JYU

Sports in University can be described as many types of sport and physical activities that occur on the college and university campuses. University sport programs were originally intended to provide students the opportunity to participate in various types of sport activities. According to Lewis (1998), growth in sports programming continues in most service settings, but one of the most prolific growth areas can be found among the universities. This area is growing because of the age range of the population it serves, the ability to provide adequate on-site facilities for comprehensive programming in a variety of sports activities, and the opportunity to conduct programs for different levels of ability and interest.

University sport services at JYU offer full range sports services to students and University staff. There are plenty of sport facilities around the university where students and staff can do many kinds of physical activities and sports conveniently (Appendix 3).

1.3.1 Sports organized by University Sport Office

In the University of Jyväskylä, sport program is designed for all the students and staff by University Sport Office before the beginning of every semester. Normally, there are three different programs, one for each semester: spring, summer and fall semester program. There is one person working full time as a sport coordinator in the university sport office who mainly is in charge of making the sport program and dealing with daily issues concerning sport services in JYU (University sport 2007). In addition, one student works part-time in the office helping the sport coordinator.

Three kinds of exercise sports program

According to the participation fee, the sport program is divided into three kinds of sports: supervised exercise (the fixed annual fee must be paid before the first class), courses (the fee varies according to the course) and unsupervised exercise (no participation fee) (Appendix 4).

Courses with credits

The University Sport Office also offers sport courses with credits, called YLIY sport course 1 and 2. These courses are optional courses for all students of the university (except for students studying physical education). The aim of the courses is to familiarize students with different sports and sports facilities in Jyväskylä according to their own choices. Both sports courses give 2 ECTS credit points and consist of 15 classes, which the student can choose according to their own choices from the YLIY-program. All the courses are free of charge.

Sports events

There are also some sport events and tournaments organized by students and University Sport Office each semester. For instance, during the spring semester 2006, rowing trip on a traditional Finnish boat, amateur basketball tournament, amateur badminton tournament, amateur futsal tournament and horseback riding trip were organized successfully. One of the characters of these sport events that should be mentioned is that some of those sport events were actually organized by some active international students themselves with the help of university sport office, such as canoeing trip (organized by an Hungarian Ph.D. student), JYU futsal tournament 2006 (organized by a Spanish exchange student), and table tennis tournament 2006 and 2007 (organized by a Chinese degree student). Those sport events which were organized by international students were available for both international and Finnish students. Especially in autumn 2006, several international students organized the "World Sport Day", which was a one-day sport event focusing on international students but also many Finns participated.

1.3.2 Sports organized by student union

The Student Union of the University of Jyväskylä (JYY) is the students' own organization. Every degree/exchange student is a member of JYY. The basic task of the Student Union is to represent its members and protect their interests and rights (Student Union of University of Jyväskylä 2007). The Student Union assists with questions

concerning studies, accommodation, or managing financially while studying. JYY organises a wide range of services and free time activities, such as cultural events, sports and trips.

Some of the subcommittees of JYY organize sport activities and events annually. The most important one is the subcommittee for sports whose attitude is that "Sports are for fun! Distances or times are not counted; the main thing is the movement" (Subcommittees of JYY 2007). Activities organised by this subcommittee include the annual JYY Cup for student organizations, as well as various kinds of courses and events. Furthermore JYY takes part in the Finnish Sport Federation activities around Finland.

1.3.3 Sports organized by other organizations and clubs

In addition to the two main providers of sports mentioned earlier, there are still some other spontaneous student organizations and sport clubs offering plenty of possibilities for international students to do all kinds of sports and leisure activities. For instance, Jyväskylän Opiskelevat Partiolaiset - JOPA ry, which is run by many students of JYU interested in scouting, organized a lot of activities related to exercise or sports, such as hiking, trekking, snowshoeing and so on (JOPA ry 2007).

2 PURPOSE OF THE STUDY

The main purpose of this study is to evaluate the sport services for international students at JYU. Simultaneously, the investigation is carried out to examine the current status of sport participation of international students at JYU and what can influence their participation in the university sport program. Additionally, this study attempts to provide suggestions how to promote the sport services of JYU in the future.

The main research questions addressed in this study are what is the quality of sport services for international students at JYU, and whether they are satisfied with it. More concretely, the contemporary status of university sport services in JYU and the international students' attitude towards sports and exercise are important in this study. In order to give meaningful suggestions, what are the most popular sports among international students and what are the disadvantages that influence their sports participation in JYU should be considered as well.

3 THEORETICAL FRAMEWORK

As mentioned in the former chapters, in order to answer the main research question, a survey was needed to evaluate the university sport services. There are many different kinds of ways to implement program evaluation. In this study Utilization Focus Evaluation Theory was selected because of its capability to focus on the evaluation of sport services for international students. Furthermore, management of sport services is an important measure for examining and improving the work of university sport office which is mainly in charge of the sport services at JYU. Additionally, SERVQUAL scale, as one common tool in evaluating services, is used in this study.

3.1 Evaluation

Every now and then policymakers, funding organizations, planners, program managers, taxpayers, or program clientele need to distinguish worthwhile social programs from ineffective ones and launch new programs or revise existing ones in order to achieve certain desirable results. In this broadest meaning, to evaluate means to ascertain the worth or to fix a value of an object. Program evaluation defined by Rossi, Lipsey & Freeman (2004, 16) is the use of social research methods to systematically investigate the effectiveness of social intervention programs in ways that are adapted to their political and organizational environments and are designed to inform social action to improve social conditions.

"The aims of program evaluation are as follows: 1) To aid in decisions concerning whether programs should be continued, improved, expanded, or curtailed; 2) To assess the utility of new programs and initiatives; 3) To increase the effectiveness of program management and administration; 4) To satisfy the accountability requirements of program sponsors. Furthermore, the program evaluation focuses on the need for a program, its design, operation and service delivery, or efficiency." (Rossi et al. 2004, 2)

3.1.1 The Utilization Focused Evaluation

There are many types of evaluations. One of them is the Utilization Focused Evaluation. The utility of an evaluation concerns both how people experience the evaluation and how people apply its findings. Utilization focused evaluation is therefore best described as a decision making process played out between the evaluator and the intended users of an evaluation. At every point in this decision making process, it is the responsibility of the evaluator to ask the intended users how would that affect your use of the evaluation.

By focusing the attention of intended users on the intended use or uses of an evaluation, Utilization Focused Evaluation builds the capacity of stakeholders to think and in act an evaluative way. This "building capacity" aspect of both Participatory Evaluation and Utilization Focused Evaluation is important in justifying the cost of evaluation itself and in encouraging middle-range and grass-root stakeholders to devote their time and resources to evaluation (Patton 1997). The mandate of the evaluator in a utilization focused evaluation is to be "active-reactive-adaptive". The evaluator needs to be active in terms of focusing the evaluation on use; reactive in terms of taking the interests of the intended users into account; and adaptive in terms of reconciling the interests of the intended users with the evaluator's interest in ensuring the utility of the evaluation (op. cit.).

Our research gives feedback to the decision makers of university sports, the university sport office, how the sport program should be improved, what new programs should be implemented, and how to manage these effectively, especially for international students in the University of Jyväskylä. In this respect, the international students were set as our target group to make a utilization-focused evaluation.

3.1.2 Program evaluation in service system

In service system, program evaluation plays an important role. Various programs are needed and emphasized for improving service field. Therefore, it is essential to investigate the program quality. The principles of program quality are the following three attributes: range of programs (Chelladurai & Chang 2000), operating time (Brady & Cronin 2001), and information. The service practitioner expects to value the program effects.

The evaluation of service contributes to the system, which is composed of planning, leadership, and actual delivery phases. Evaluation of service is useful for the professional development of the service industry, tests objectives, expanding knowledge of human behaviour and motivation, and offering tangible data and information. Researching evaluation of service aims to guide and justify program development and the continuation of existing services. Three basic approaches of program evaluation focus on exploratory studies, descriptive studies, and experimental research. Each attempts to increase the knowledge over human behaviour in services.

For this research program evaluation contributes to the University of Jyväskylä being useful for future improvements in planning, managing and promoting university sport services.

3.2 Management of sport service

Investigating sport service, firstly it is important to understand the concepts of service and sport service, in order to analyze and define sport service. Providing high quality service mostly depends on the management. If the provider organizes services effectively, the service quality will be evaluated high, because customers are satisfied with it. But if a manager ignores the service strategy, it may be difficult to meet the needs of customers, and the service quality will be evaluated low. Therefore it is useful to study these dimensions: service, service quality, customer satisfaction, and management of service, based on their closed relationships.

3.2.1 Sport service

One definition of service states that "Customers are spending money and time to make it possible to make use of goods for the service they get from a bundle of goods and necessary supporting resources required to use these products." (Grönroos 2005, 13). This concept is based on three aspects: consuming from customer, process of using goods, and supporting resources from provider.

First, customers must barter money and time to get sport services. At the university, students are the main customers for university sport services, and they pay fees (for some services) and invest time to get sport services. Second, using products is a whole process. Service is one kind of a product, and the production and consuming of the service is simultaneous. The study university sport services are aiming to improve the quality of service and get rid of obstacles causing inconveniences for students while they do sports. Third, supporting resources are the basics of providing services, and they include factors, such as personnel who offer services to customers, equipment, facilities, and materials.

3.2.2 Service quality and customer satisfaction

Service quality has been argued commonly to relate closely to customer satisfaction (e.g. Chelladurai & Chang, 2000). On one hand, great emphasis has been given presently to the fact that service quality is mainly analyzed from the aspect of customer in order to satisfy the customers' expectations (Kim & Kim 1995, 211). On the other hand, service quality can also be considered from the viewpoint of management. A study by Grönroos (2001) showed that a service marketer needs to know and assess how customers perceive the quality of product/service, in order to make consumers satisfied with the service. When the service provider realizes that service quality is evaluated by the users, it is possible for the provider to identify the management of services in order to produce a desired service.

Based on earlier research, there still are differences between service quality and customer satisfaction. Service quality is conceivably researched at the side of service production. For example, manager demands to adapt appropriate strategies to match the

expectations of customers. However, service satisfaction should be defined from the aspect of customer. Robinson (2004, 63) mentions that customers are satisfied with the service, because the service meets customers' standards of service quality. On the contrary, if the service does not meet the customers' expectations, service quality is poor.

Sport office is in charge of the sport services for students at the University of Jyväskylä. Students are regarded as the service customer at the university. Improving sport service quality and attracting more students to participate in the sport program are the main aims of the sport office. The level of sport service quality can reflect service management. The university sport services were investigated, on one hand, aiming at the purpose of improving service quality to satisfy higher demands from students. On the other hand, survey of sport services was made for sport office of Jyväskylä University. The sport coordinator hopes to use the survey to identify which are the popular and less popular items in the sport program. The degree of sport service depends on the students who join the university sport exercises. In other words, these students accept the sport service provided by the sport office, so their suggestions or thoughts about the sport program mostly can reflect the level of the sport service quality. It rests with these sport services whether they can meet their expectations.

3.2.3 Managing and evaluating service quality

Improving service quality is demanding, because the customer always desires for better service. On one hand, service providers hope to attract more customers and get more profit, so they try to improve service quality to pursue the needs of customers. On the other hand, customers' demands are increasing over time, so it is very hard to measure the satisfaction of customer (Grönroos 2001). Moreover, even the same service provided to different people, can be perceived in diverse levels of service quality. Therefore, it is impossible to provide invariable services to satisfy all of the customers' needs (Alexandris, Zahariadis, Tsorbatzoudis & Grouios 2004, 281). For these reasons, classifying customers according to different situations is feasible. This way, service

programs can be provided hierarchically and multidimensionally, to satisfy the expectations of different target groups (Howat, Absher, Crilley & Milne 1996, 77).

International students as an object of our research can be categorized as different groups and analyzed based on the factors of gender, nationality, faculty, student right, and study period. First gender factor, Bem Sex Role Inventory (BSRI) examined that the gender can influence the motives for sport participation, because of some differences in the social construction of males and females (Nathalie 1999, 378). Second, people from different areas may have their own habits to do sports, so it could be that nationality is a significant factor affecting sport participation. There are many faculties at JYU where international students study in. A major partly reflexes personal interests and characteristics. There is a relationship between personality and sport participation. For example in university, the students who study physical education probably are more active and engage more in doing exercise than the ones who study in other faculties. The fourth factor is the mode of study. International students are at JYU either as degree students or exchange students (for more information see "Introduction of international students at JYU"). Their identities influence their study periods in Finland. For instance, if students stay in Finland as exchange students for a short time, just a few months, the average sport program and services may satisfy them. On the contrary, international students who study at the university as degree students for a longer period of time, doing exercise might be a significant part in their lives, and their demands for services could grow. Last but not least, student right as a factor can be explained with the way of life of international students. As exchange students they often prefer to travel more and enjoy their time with new friends, so sport perhaps is has not an important role during this special period. Whereas degree students concentrate more on studies and therefore their way of life does not change that much compared to their home country, and in that doing sports could be a good choice for leisure time.

3.3 SERVQUAL scale

SERVQUAL scale (Parasuraman, Zeithaml & Berry 1988) has widely been applied in

studies of service quality. Based on the gap between customers' expectations and perceptions about the service, Parasuraman et al. (1988) also suggest evaluating service quality from five dimensions: Tangibles, Reliability, Responsiveness, Assurance, and Empathy.

Tangibles consist mainly of physical facilities, equipment, personnel and communication materials. According to the definition of service (Grönroos 2005, 13), this dimension of tangibles appears to be supporting resources. A certain kind of service is provided based on these resources. In terms of university sport services, sport facilities, equipment and sport instructors definitely belong to supporting resources. Communication materials are the tools for contacting students to advertise sport services at the university. They are also important equipment. As regards to this study, organization of sport activities as a solid integration is conceivably understood as the appearance of sport service organization (sport office at JYU).

Reliability can be showed from providing promised service dependably and exactly. Two key points in this concept clearly are "whether the service which has been promised can be delivered or not" and "dependably and exactly". They can be described as "the content of service" and "the result of offering service". On one hand, the coordinator of sport office first designs the sport service information that publishes the promised services, and then running the whole sport service system is performing the services. On the other hand, the success of providing sport services depends on the satisfaction of students.

Responsiveness is the aspect of evaluating employee's willingness to help customers and try to solve customers' problems providing appropriate services. First, it needs to focus on "employee's willingness to help customers". There is a difference between "help customers" and "willing to help customers". Clearly, the latter shows the passion of employee to customers. For example, when the coordinator of sport office realizes that some students hope they can borrow sport equipment from university the

coordinator should respond to the problem as soon as possible to find some extra sport equipment to lend to students. Second, "providing appropriate service" mainly represents the abilities of employee to answer customer's questions. If it is really hard to meet the need of customers, employee also should apologize and give the relative explanation to the problem. Considering the university sport services, there are many obstacles for borrowing equipment to students, such as lack of resources, difficulties in management. Facing these problems, the coordinator should finance sport equipment and enhance the management, and try to make it possible to borrow equipment to students.

When employees provide services, whether the customer trusts the employee and the service quality mostly depends on the knowledge and ability of the employee, which forms a kind of belief called assurance. For example, when a student does exercise, he/she could come up with a question that "Which muscle is trained now by doing this exercise?" He/She wants to get an answer from the instructor. As a sport instructor, the main task is not only to teach the course and give instructions but also answer relative questions from students. Of course, the instructor cannot mislead the students by giving a wrong explanation. It requires the service providers to have a high level education and to be competent.

Empathy consists of providing personal service and paying attention to individuals. Every customer does sport activities with their own aims, interests, and different situations. If service provider disinterests in these varieties performing the exact same service to every customer, it is certainly difficult to satisfy everyone and meet their needs. As mentioned before in the part of "Managing and evaluating service quality", it is essential to classify the target group. For example, in the university sport service system, the coordinator of sport office designs the supervised sports courses according to the different skill levels. Therefore, it is easy for students to choose the sport courses which are suitable for them.

This SERVQUAL scale is mainly used for analyzing qualitative research data, but also partly applied to the questionnaire of quantitative research. Through analyzing data, this research tries to find the gap between the expectations of students for university sport services and the current situation of provided sport services.

4 IMPLEMENTATION OF THE STUDY

In the following part, the research methods used in this study and how this study was implemented are explained. At the beginning, how and why both quantitative and qualitative research methods were used is demonstrated. And then, collecting the data and analysis of the questionnaire and interviews are introduced.

4.1 Research Design

According to the purpose of this study, to evaluate the university sport services for international students as well as to investigate their current status of sport participation at JYU, questionnaire and interview were both used. General information on international students' sport participation and the satisfaction with university sport services were examined in the questionnaire. Furthermore, individual interviews with international students, the coordinator of university sport office, the foreign student advisor of international office and an active sport events organizer were carried out to analyze and evaluate the university sport services. The reasons why quantitative and qualitative research methods were combined in this study are explained in the following.

First, the quantitative research can provide a reliable and representative data. In order to find out the quality of sport services for international students and their sport participation at JYU, a survey was conducted by using a questionnaire. Here, in this study, according to the utilization program evaluation theory, international students of JYU were chosen as research subject. Questions regarding the SERVQUAL scale to examine the sport services quality for international students and questions concerning their sport participation were included in the questionnaire. Moreover, the satisfaction and sport participation of international students were examined by gender, nationality, study rights, duration of stay in JYU and enrolled faculty through using cross tabulations.

Second, although the results of the questionnaire can provide abundant useful information, it still has some limitation. For example, individual feelings and experiences about the university sport services of international students are absent from the results of the questionnaire. Therefore, qualitative research is needed. To get better understanding about the university sport services, individual interviews were carried out with international students, the coordinator of university sport office, the foreign student advisor of international office and an active sport events organizer. Furthermore, after analyzing these interviews according to the five aspects of SERVQUAL scale, valuable suggestion could be provided to university sport office based on the information and findings of the interviews.

In the questionnaire, general information of respondents was asked first, including the gender, nationality, enrolled faculty, study right and duration of stay in JYU. Next, specific questions were asked about international students' sport participation at JYU. The last but also the most important part of the questionnaire was designed partly according to the SERVQUAL scale to evaluate the university sport services. Semi-structured questions were used in the interviews to collect individual feelings and experiences of sport services. Interview questions and questionnaire were supplementing each other to analyze the current situation of international students' sport participation at JYU and evaluate the university sport services. Furthermore, utilization focused evaluation and management of sport services were used when interviewing the coordinator of university sport office, the foreign student advisor of international students and an active sport event organizer to provide more information for the evaluation. The relationship between the main research questions of this study, theoretical framework and questions in the questionnaire as well as the interviews can be seen on the next page (Table 1).

Table 1. Relationships within Research Design

Research Topic	Research Question	Theory		Questionnaire	Interview									
		SERVQUAL scale												
			Facility	Q15	Q4(4)									
			Equipment	/	Q+(+)									
		Tangibles	Personnel	/	Q4(5)									
			Communication materials	Q8	Q4(3)									
			Organization	Q14c	Sport coordinator									
Evaluation of	vices for service quality of university sport	Reliability	Time	Q14a	Q4(3)									
sport services for			Location	Q14a	Q+(3)									
international		Dognongiyonogg	Sport office	/	Q4(6)									
students of JYU	for international		Instructor	Q12c	Q4(5)									
	students	students	students	students	students	students	students	students	students	students	Assurance	Sport office	/	Sport coordinator
		Assurance	Instructor	Q14b	Q4(5)									
		Empathy	Personal sport	/	Sport coordinator									
			Personal instruction	Q12h	Q4(5)									
		Hillipation focus analystics			Sport coordinator									
		Utilization focus evaluation Management of sport service		/	Foreign student advisor									
		Iviana	gement of sport service		Sport event organizer									

4.2 Methods of data collection and analysis

In this part, how to collect and analyze the data from questionnaires and interviews are explained. In particular, the procedure of making the questionnaire, delivering the questionnaire in three different ways and analysis process are shown as well as the implementation procedure of the interviews.

4.2.1 Questionnaire

Procedure of collection

The population of this study consists of the international students of JYU, including degree students and exchange students in all faculties. In order to get as much information as possible, all the international students who were registered at JYU by the end of September 2006 and had allowed the personal email addresses to be given for research purposes were chosen as our sample (N=648).

The questionnaires were distributed in three ways:

1) Email

The questionnaires were sent to all international students who had given permission to use their contact information via email which were got from international office of JYU.

2) Delivering in the international office

At the end of the semester, the exchange students who would leave JYU were asked to fill in the questionnaire in the international office before they left.

3) Delivering during the sport events

During the 2006 table tennis tournament and World Sport Day of JYU, the questionnaires were delivered directly to the international students and asked them to fill it in.

All the questionnaires were distributed between October and December 2006. Out of the 648 international students of JYU, 223 questionnaires were returned by the end of January 2007 and 206 of them were valid for analysis. The total response rate was

Reliability and Validity

The questionnaire was designed based on previous studies on sport participation and evaluation of sport service. The first version of the questionnaire was checked by a native English speaker carefully to correct the language and partly modified by the coordinator of sport office of JYU who wanted to get more pertinent information with the questionnaire. From the Department of Sport Sciences 15 students were chosen to fill in the questionnaire for a pre-testing trial. Then the questionnaire was revised according to the specialists' opinions as well as the pre-testing students' feedback. The final version of the questionnaire consisted of 16 questions with the total of 47 fixed items including four major sections concerning international students of JYU: (1) General information; (2) Attitude towards sport and exercise; (3) Sport participation; (4) Satisfaction of sport program. (Appendix 1)

This research chose all the all the international students who were registered at JYU by the end of September 2006 and had allowed the personal email addresses to be given for research purposes as the target to investigate (N=648). Finally 223 questionnaires were returned by the end of January 2007 and 206 of them were valid for analysis. The total response rate was 31.8%. Although the respondent rate seems rather low, the behind reasons can be demonstrated. First, it is a fact that some international students does not study at in Jyväskylä at all though they have registered. That is to say there are fewer students who are stay in Jyväskylä than those who have registered. Second, some of the contact information of email addresses that international office afforded is invalid due to many unknown reasons. From these points of view, the response rate can be seen as the description for the international student at JYU.

As introduced in the first part of this thesis, there are seven faculties in JYU. But the international students are varied in those seven faculties. From the Table 2, it can be found the respondent distribution in different faculties almost matches the realistic

distribution of international students at JYU. Therefore, the results of this investigation are representative for the international students and can explain the current status of sport services for international students at JYU.

Table 2. The Samples and Respondents Distribution in JYU

Faculty	Total	Percent (%)	Respondent	Percent (%)
Faculty of Humanities	199	30.0	42	20.4
Faculty of Sport and Health Sciences	99	11.9	36	17.5
Faculty of Business and Economics	104	15.7	34	16.5
Faculty of Social Sciences	95	14.3	29	14.1
Faculty of Information Technology	82	12.4	24	11.7
Faculty of Mathematics and Science	74	11.2	22	10.7
Faculty of Education	30	4.5	19	9.2
Total	663	100	206	100

Basic Information about the Samples

Among the returned and valid questionnaires (N = 206), male international students represented 45.6% (N=94) while female international students represented 54.4% (N=112) of the respondents (Table 3). Meanwhile, more than fifty persent of them were exchange students (N=109) and 47.1% degree students. (N=97) (Table 4).

Table 3. Genders of Respondents

(N=206)				
	Frequency Perce			
Female 112		54.4		
Male	94	45.6		
Total	206	100.0		

Table 4. Study rights of Respondents

	(N=206)				
	Frequency	Percent (%)			
Exchange	109	52.9			
Degree	97	47.1			
Total	206	100.0			

The respondents were registered in all the seven faculties (Table 5), the most common faculty was Humanities (20.4%, N=42) and the least common Faculty of Education (9.2%, N=19).

Table 5. Enrolled Faculties of Respondents (N=206)

Faculty	Frequency	Percent (%)
Faculty of Humanities	42	20.4
Faculty of Sport and Health Sciences	36	17.5
Faculty of Business and Economics	34	16.5
Faculty of Social Sciences	29	14.1
Faculty of Information Technology	24	11.7
Faculty of Mathematics and Science	22	10.7
Faculty of Education	19	9.2
Total	206	100.0

Those international students who filled in the questionnaire came from 45 countries (including Chinese Taiwan and Hong Kong). Most of the international students came from Europe (N=147), the top three countries were Germany (N=25), France (N=16) and Czech Republic (N=13). The top three countries among other 59 Non-European respondents were China (N=18), USA (N=9) and Canada (N=6).

Meanwhile, more than half (54.4%) of them had been in JYU for 3-6 months. Only 8.3% of the international students stayed less than 3 months. 10.7% of them had been there 6-12 months. 13.1% and 13.6% of them had been in JYU 1-2 years and more than 2 years (Figure 1).

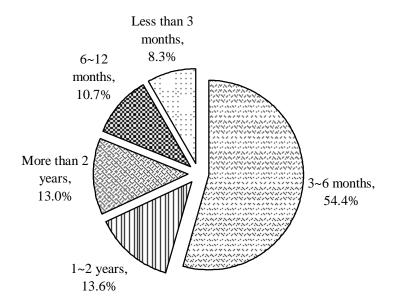


Figure 1. Durations of stay in JYU of Respondents (N=206)

Data Analysis

In this research, the variables of the questionnaire were coded and put into SPSS 12.0 for windows for analysis. The basic findings were described with frequencies and percentages. Furthermore, cross tabulations were used to examine the relationships between basic information, including gender, nationality, study rights, enrolled faculty and duration of stay in JYU, the satisfaction with sport services as well as international students' sport participation at JYU.

4.2.2 Interview

Interview Design

According to the different purposes, two interviews were designed for two different target groups: international students at the University of Jyväskylä, officers and an organizer at the University of Jyväskylä.

The interview of international students was mainly based on SERVQUAL scale about the evaluation of service quality. According to the actual situation of case study and SERVQUAL scale five dimensions (tangible, reliability, responsiveness, assurance and empathy) the interview outline was drafted for the sample of international students. In addition, the other method, utilization-focused evaluation was mainly used in the interview of the university staff and event organizer.

After finishing the interview design (Appendix 2), the same English native speaker to corrected the language of the interview questions. Moreover, the test interview also was done for this person.

Participants

For the international students' interviews, the interview samples were selected with Random Purposeful Sampling (Patton 1990), in order to add credibility to the sample and decrease judgment with the chosen category. Six international students were chosen for the interviews (Table 6). These students included three exchange students and three degree students, half of them female. Taking the same number of exchange/degree students and male/female students, the purpose was to analyze the situation of sports participation with the comparative sample. According to the university statistics, Germany, Russia and China were the top three countries where most international students came from, so the interview sample should include students from these counties. Considering that most international students were from Europe, Italy with a quite high student amount at JYU was chosen to be a representative of Middle Europe. Canada and Kenya also with high student amount at JYU were the typical countries of America and Africa considered into the interview sample. Faculty was the other considerable dimension to analyze students' sport participation. Through quantitative analysis, there was no obvious difference between faculties for students to participate in sport activities, except sport faculty. Two interviewees were chosen from sport faculty to be considered. They knew slightly more about sport services than the students who studied in other faculties. In other words, sampling was based on study right, nationality, and gender rather than field of study.

Table 6. Information on Sample (N=6)

	Student A	Student B	Student C	Student D	Student E	Student F
Gender	Female	Female	Female	Male	Male	Male
Study right	Exchange	Degree	Degree	Degree	Exchange	Exchange
Faculty	Sport and Health Sciences	Business and Economics	Information Technology	Business and Economics	Mathematics and Science	Sport and Health Sciences
Nationality	Canada	Russia	China	Kenya	Germany	Italy
Came time	Sep. 2006	2002	Sep. 2005	2003	Sep. 2006	Sep. 2006
Duration	Half a year	Five years	Two years	Four years	One year	Half a year

Interview Procedure

Six international students were interviewed between 8th Dec 2006 and 29th Jan 2007, and the interview places were around the University of Jyväskylä. Five interviews started in the afternoon and one was in the evening. Duration of the interviews varied from 13 minutes to 25 minutes approximately. In addition, pair works were done for the interviews except one. Liu was the emcee for four (out of six) interviews and Ma was in charge of observing gestures and expressions of the interviewees. During most of the interviews, questions were asked in turns. With the agreement of the interviewees, each interview was recorded, and Ma made the lettering of every interview. All interviewees have checked and verified their own data.

The other interviewees were the Coordinator of sport office, Foreign Student Adviser of international office, and one student as a sport events organizer. Their interviews were done between 2nd Dec 2006 and 14th Jan 2007 and they took place in the university. Two interviews started in the afternoon, and the third one was in the morning. The durations of these three interviews were from 17 minutes to one hour 3 minute by pair work. Liu was the emcee and Ma was the observer and letterer again for each interview. We also asked questions in turns and recorded all interviews with the agreement of interviewees, who have checked and verified the data from their

interviews.

Data analysis

There were three methods applied to our interview analysis. The explanation and application are in the following:

Constant comparative analysis was mainly used to analyze the differences between international and Finnish students. For example, it is rather uncommon for a foreign student to give feedback to sport office, but Finnish students are much more active to suggest improvements for sport services. Therefore, it is difficult for the coordinator of sport office to know the foreign students' opinion about university sport services and provide suitable physical activities for them.

Phenomenological approach was used to describe the interviewees' experiences. Each interviewee had their own experiences and opinions of doing sports at the university. For instance, most international students were satisfied with the reliability of sport service information, but two (out of six) interviewees had their own special experience that showed certain disadvantages about the sport service information.

Narrative analysis and discourse analysis were applied to investigate the interviewees' attitudes and evaluative standards about the quality of sport service at JYU, based on their narration and expressions. For example when interviewees (foreign students) mentioned that the language of teaching was Finnish making it hard for them to follow, most of them were showing strong emotions. It was clear that the language barrier was an important factor influencing international students' participation in sport program in the university.

5 SPORT PARTICIPATION OF INTERNATIONAL STUDENTS AT JYU

As mentioned before, the University of Jyväskylä has offered different sport services for all the students and staffs. Although the international students of JYU are not the majority population in the university, how they involved in sports at JYU need to be investigated which is essential to evaluate the university sport services for them. In the follow part different categories concerned international students involved in sports at JYU were discussed.

5.1 Attitudes towards sports and exercises

Sports and exercises do not only promote people's health and well-being, but also offer a lot of fun and enjoyment. In recent years, with the development of society and economics, more and more people take sports and exercises as one indispensable part of their life, especially young people. To understand the status of sport participation of international students of JYU, firstly how much they enjoy participating in sports/exercises in their spare time should be known.

From the data of our research (Figure 2), it was found that nearly seventy percent of international students at JYU like doing sports/exercises during their spare time (33.0% enjoy very much and 35.9% enjoy much). This result shows that most of international students at JYU are engaged in doing sports/exercise and states the importance of sport services within JYU for international students. While 17.0% and 11.7% thought they do not enjoy sports/exercises much or just a little, only 2.4% of them responded that they don't like it at all.

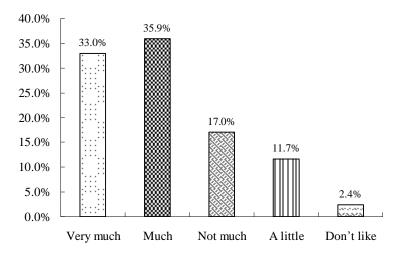


Figure 2. The Depth of Enjoying Participation in Sports/Exercises of International student's at JYU (N=206)

From Table 7, gender and enjoyment of participation in sports/exercises at JYU, it can be seen clearly that there is a significant relationship between gender and enjoyment of sport participation. Male international students enjoy sport participation much more than female students.

Table 7. Gender and Enjoyment of Participation in Sport/Exercises at JYU (N=206)

Enjoy participating in sport/exercise at JYU						
	Very much	Much	Not much	A little	Don't like	Total
Male	47	25	10	10	2	94
Female	21	49	25	14	3	112
Total	68	74	35	24	5	206

Note: $X^2 = 23.62$, p<0.01

5.2 The importance of sport services in choosing university

Although sports and exercises play an important role in people's daily lives, there were only a few students who considered sport services seriously when they were choosing which university to apply for degree or exchange studies because the main aim for them was still the studies, not leisure activities. From our data (Figure 3), it shows that among all the respondents, nearly half (43.9%) thought the sport services cannot influence their decision while 19.9% of them admitted it influenced a little.

However, one interesting result is that 6.3% of international students of JYU considered sport services to be a very important factor influencing their decision on which university to apply for. Meanwhile, 11.7% of them thought it is important. The reason for this could be that there are respondents from Faculty of Sport and Health Sciences which is the only university level educator in this area in Finland. There is no doubt that the sport services influences those students whose studies concern sport science and other related subjects directly. Another reason is likely the exchange students from west European and south European countries. When they applied for exchange studies, some of them wanted to experience the winter sports which were not available in their home country. In that way, the typical weather condition for winter sports in Finland can attract them.

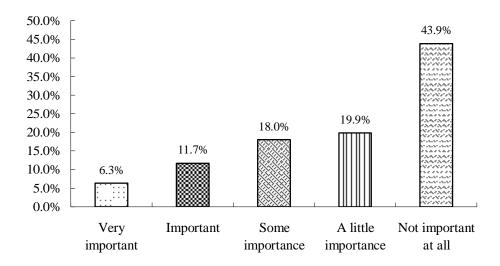


Figure 3. The Importance of Sport Service Influence Choosing University (N=206)

5.3 Sport participation

From the result of participation in sport program (Table 8), among the five items of sport program, it was found that the participation rate of unsupervised exercise, 49.0%, is the highest one. More than half of international students have never participated in supervised exercise (54.4%), sport courses (67.0%) and courses with credits (63.1%). The language barriers and lack of information might cause difficulties for international students to take part in those activities. While 7.8% of respondents mentioned that they have participated in sport events quite often 32.5% of them said they have participated in university sports.

Table 8. The Percentage of Participation of University Sport Program (%) (N=206)

	Unsupervised exercise	Supervised exercise	Sport courses (need fee)	Sport events	Courses with credits
Quite often	49.0	16.5	4.9	7.8	7.3
Seldom	35.7	20.9	19.4	32.5	14.6
Never	21.8	54.4	67.0	47.6	63.1
Unaware	3.5	8.3	8.7	12.1	15.0
Total	100	100	100	100	100

The ten most favorite sports among international students of JYU are soccer, swimming, gym training, squash, dance, yoga, aerobics, table tennis, volleyball and downhill skiing (Figure 4).

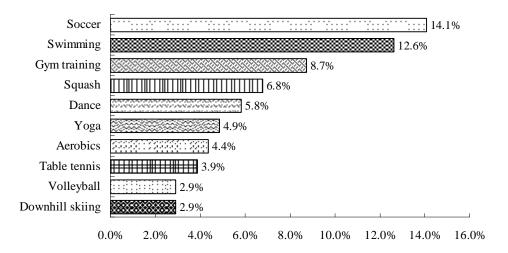


Figure 4. The Top Ten Favorite Sports of International Students' of JYU (N=206)

5.4 Factors influencing physical activity

From the data presented earlier it was found that most international students at JYU were engaged in sports/exercises in their leisure time. When asked to compare their physical activity at JYU and in their home countries (Figure 5), 44.2% of respondents thought they were more active at JYU. This result shows JYU has provided good conditions and high quality of sport services for doing sports/exercise. Thus, suited sport program and different kinds of facilities and equipment offered by JYU give students abundant opportunities to do sports/exercise.

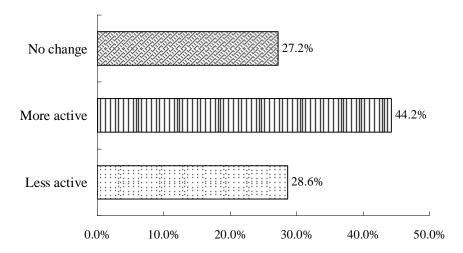


Figure 5. The Change of International Students' Physical Active in JYU (N=206)

Whereas, 28.6% of international students thought they were less active in JYU. In order to investigate the reasons behind this, the disadvantages affecting doing sports/exercises in JYU were explored, based on which the aim of this study that would give feedback to the university sport office for future development.

From the Table 9, nationality and physical activity change at JYU, it is clear that there is a significant relationship between nationality and changes in physical activity. International students from European countries are more active at JYU than students who come outside of Europe.

Table 9. Nationality and Changes in Physical Activities at JYU (N=206)

	Changing of International Students' Physical Activity after study in JYU			
	More activity	No change	Less activity	Total
European	69	44	34	147
Non-European	22	12	25	59
Total	91	56	59	206

Note: $X^2 = 7.75$, p<0.05

The Figure 6 shows that factors hindering physical activity are lack of time (44.7%), weather (33.5%) and lack of partner (30.1%), which are all more than thirty percent of the total. For most of the international students the overlapping of sports program with schedules can explain why lack of time is the most common reason. For example, many supervised courses take place in the afternoons when normally students have lectures. Furthermore, almost all the sports/exercises have specific and limited times, for instance one hour per week. Although some sports, like squash, which is quite popular among international students, are free for everyone the problem is that after school it is hard to book it since that is the most popular time. Another reason is that Liikunta, in which there are many sport facilities, is closed during weekends when international students have free time to do sports/exercises.

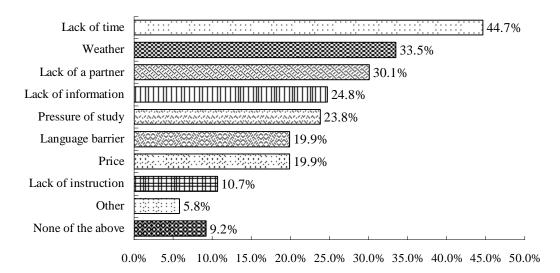


Figure 6. Factors Hindering Physical Activity at JYU (N=206)

Of all the factors one third (33.5%) of the respondents selected weather as a hindering factor. Like coin has two sides, the weather in Finland can be seen as both advantageous and disadvantageous factor for doing sports/exercises in JYU. On the one hand, students who like doing winter sports, such as skiing, skating, ice hockey and so on love the long and cold winter. Moreover, the sport program of JYU uses this weather advantage to offer many kinds of winter sports. On the other hand, for those students who cannot adapt to the winter, the weather might reduce and even cut off their physical activities. Besides, the long and cold winter makes it impossible to do some outdoor activities. For instance, students who like playing soccer on outdoor fields were disappointed during the winter though indoor football or futsal was offered instead.

The third hindering factor is the lack of partner in particular to those students who like doing a certain kind of team sport or other sports requiring more than one person, such as soccer, basketball, badminton and so on. Actually, there is a fixed schedule of those team sports in JYU. But the problem is that it is a little bit difficult for most international students to get involved due to the language barrier and lack of information as.

Although the expenditure of doing sports/exercise in JYU is rather low comparing with the living costs in Finland (most of the facilities which belong to JYU are free of charge or have some special offers for students) 19.9% of international students still mentioned the price as one disadvantageous factor.

Around one tenth (10.7%) of international students chose the lack of instruction as a disadvantageous factor for them doing sports/exercise in JYU. This was typically answered by students who want to learn some winter sports and others which require more skills and teaching. So far, JYU has provided several instructed courses focusing on winter sports, such as cross-country skiing, downhill skiing, snowboarding, but it seems that they still cannot meet the needs of international students.

6 ANALYSIS OF SPORT SERVICES OF JYU

With all of the sports services offered by the University Sport Office and the Student Union of University of Jyväskylä, students have ample choices to choose whatever they like during their leisure time throughout the year. In order to improve the service quality of university sports, annual report of evaluation of university sport services has been made for several years, but only focusing on Finnish students and staff. In recent years, more and more international students have studied in the University of Jyväskylä. For those international students who come from different cultures, economic backgrounds and experiences compared with Finnish students, they must have different feelings about the university sport services. What do international students think about the sport services offered by JYU? Are they satisfied with the sport services at the moment? What should be done in order to improve the sport services for international students in University of Jyväskylä? In this part, the data from questionnaires and interviews were analyzed to find answers to the questions above.

6.1 Appearance of supporting resource

According to the concept of sport service that was given earlier, the recreation program needs supporting resources, such as facilities, equipment, personnel, organization of activities and finance. In other words, without these resources, it is impossible to offer sport services. In addition, considering the SERVQUAL scale (Parasuraman 1988), tangible is one important dimension when evaluating the appearance of physical facilities, equipment, personnel, and communication materials. It is possible to evaluate JYU sport services based on the combination of service concept, tangible dimension and specific situation of JYU sport services.

6.1.1 Facilities

It is common to evaluate sport facilities by the following factors: category, size, function, condition and maintenance. However, investigating the variety and size of sport facilities were focused, according to the evident problems reflected by

international students.

Various facilities

By interviewing the coordinator of sport office at JYU, we learnt that there is cooperation on sharing sport facilities between the university and the city of Jyväskylä. This means that the students of JYU can use the Jyväskylä city's sport facilities, and some sport courses and events organized by the university also can use the sport facilities that belong to the Jyväskylä city. For the university students, this cooperation increases the scope and options of doing sports. The result of satisfaction of international students with sport facilities of JYU from questionnaires demonstrated that they were satisfied with most of the sport facilities (Figure 7). Only a few people stated that the facilities were poor. However, one thing that should be considered is that some international students are not very familiar with the sport facilities partly because they never use them. Numerous students appreciated the opportunity to use both the sport facilities of university and Jyväskylä city, because this way they had more options to choose from

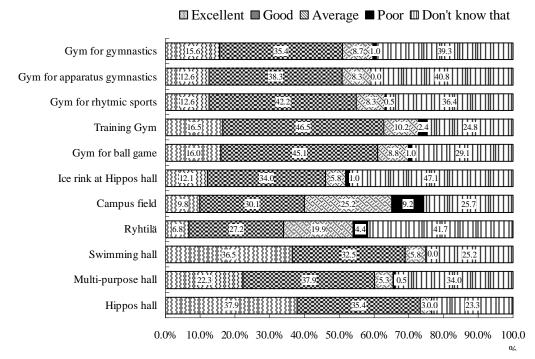


Figure 7. The Satisfaction of International Students with Sport Facilities (N=206)

Size of the sport facilities

Although it is possible for university students to use both sport facilities of university and Jyväskylä city, most students are used to do sports at the university and use university sport services. Hence, there is a problem with the size of sport facilities being slightly small, and it is the main reason for some students to rate the facilities as "average" or "poor" (Figure 7). The small size of sports areas at the university causes complaints from the students. For example, in the yoga courses, it is impossible for Sport office to provide students with professional yoga mats, because the professional one is a bit bigger than the one that is offered now and there just is not enough room. The coordinator of Sport office regrettably explained that they provide students with the mats that are quite small. She also assured that if there was enough room, she would offer the professional yoga mats. However, some students believe the "small room" frustrates them. Coming back to the yoga mats example again, one student interviewee strongly argued that:

We [the University of Jyväskylä] did not have the proper yoga mats. We just have the two foam things, so when we did the poses with the yoga mat, it is sticky. So I cannot do poses well, such as up and down, and turn. You know, when my back and stuff like that, I had to do it on the floor, so a couple of poses I would just slip out of it. So it is better have the yoga mats, but we did not.

Two other of the six interviewees were also disappointed at the size of gymnasium at the university. One of them said that:

Gym in Liikunta [Sport Building at university] is kind of small, and I don't have many options in the gym. I am not against the school gym. I just like more spacious environment where I can move on.

Based on our investigation, three reasons can explain this situation. First, university has limited facilities for students, and that is why the university needs to share the sport

facilities with Jyväskylä city. Second, there are so many students doing sports at the same time, because the university sport facilities are not always available. This aspect may relate to the sport program organization, and it will be mentioned later. Last but not least, the facilities for popular sports are used frequently. For example, some sports such as ball games and gym training are very popular with students, so these sport facilities are used often and can attract many students. On the other hand, some sports like martial arts are less popular, so the facilities are quite free.

In brief, through investigating it shows that most students are very satisfied with the various sports facilities provided by university and Jyväskylä city, as one interviewee said "I feel really good to do sports here [in the University of Jyväskylä]." However, the small size of some sport facilities is a big problem. Our suggestion is to increase the opening hours and availability of the facilities. Moreover, doing more advertising of sport services is important. From the Figure 7 it can be seen that quite many students are unfamiliar with the university sport facilities. This issue will be discussed more in the part of communication materials.

6.1.2 Equipment

Students who do exercise at JYU are provided with some sport equipment, because it is one kind of service of the sport office. It aims at satisfying the needs of teaching, providing convenience for students. In terms of the management of equipment, there are two aspects that will be addressed next.

Maintenance of equipment

Sometimes doing sports can be dangerous, and the conditions of sport equipment can affect the safety of doing exercise. The Sport office is in charge of the maintenance of sport equipment at the university. To guarantee the safety of students, the coordinator of Sport office is careful with the maintaining of sport equipment. She explained she tries to keep the equipment in good condition, and every holiday, such as Easter, all the sport equipment is checked. She said that one way to know the condition of the equipment is

to experience it herself, and the other way is the feedback from sport instructors and students. Sometimes, instructors and students notice broken equipment and tell the coordinator to repair it or buy new. There are two men who can help the Sport office to repair the sport equipment. If they cannot do it, the coordinator will ask the help from repair shops.

Because Sport office pays much attention to the maintenance of sport equipment, most students give extremely high evaluation about it. Three interviewees thought that the sport equipment were practical and easy to use.

Equipment borrowing

Sport office also provides the service of lending sport equipment to students. It is aiming to encourage students to do more sports and reduce the expense of sport equipment for students. From the viewpoint of students, they can try different sports saving a great deal of money, so it is a very popular kind of service with students. Unfortunately, the situation and rule of borrowing sport equipment is an unclear concept for most students.

One interviewee did not know that it was possible for him to borrow equipment at university, so he suggested that:

Maybe they [Sport office] should offer renting service and hire a persuasive person to rent the stuff there. Maybe need to pay some money for renting of course.

Another interviewee expected that through the investigation it could give an answer to her historical problem about borrowing sport equipment:

There is one problem that also I don't know what about now. It maybe two or three years ago that I really didn't know if the place where I can rent the skates. I

bought my own ice skates. Sometimes some friends visited me, and we wanted to go to ice-skating. I went to ask everywhere in the university where I could rent the ice stake, and they said go to Hippos-hall [one sport field]. I went there and started to ask, and they said "no", we don't know, we don't rent, and people don't speak English very well. I went to a lot of places in that area, and nobody knew where I could rent ice skate. In Finland every people they have their own, so that was so frustrated. I still don't know even now where I can rent the ice stake.

It is easy to see that some students have no idea about the place where they can rent or borrow sport equipment, the content what equipment they can rent/ borrow, the period of renting/borrowing, the price and so on. With these questions in mind, the coordinator of Sport office was interviewed. She answered that:

I have told the international students that they can borrow some equipment from the university. Especially they want to play group sports such as volleyball or basketball. We also lend bats and gloves, equipment for boules and frisbees. Students who participate in the courses of university sport also can borrow skies and rackets, but for other students, we don't lend, because they are expensive and we do not have many.

When asked where students can borrow or rent equipment, she answered that they could come to Sport office to ask.

By interviewing the coordinator, it was found that not only does the university provide sport equipment for the students who exercise at university, but also lend some kinds of equipment out of JYU. It could be possible to borrow some equipment from the university with certain rules:

Providing sport equipment with the students in the university sport courses and

doing exercises first. After their using, the equipment is available for individual and groups for borrowing. So it depends on what kind of equipment, when and for what kind of groups the students would like to borrow.

Based on this situation, aiming to provide sport equipment lending service well, satisfy students' needs, and improve the management, it is important to institute rules for equipment borrowing, including the item of equipment, availability, location, possible price of renting and compensation. In addition, advertising the information and rules of equipment borrowing to students should not be ignored.

6.1.3 Personnel

Sport office is the main institution at the university in charge of the whole sport service system, other two groups contributing to the sport events are Student Union and other sport organizers. Next the sport office was examined.

Sport office

The personnel of sport office consist of the coordinator and all the sport instructors. The coordinator manages all the sport instructors who give sport courses and supervised exercises.

In addition, the coordinator also plans, organizes and advertises the sport program for students and staff at the university. The coordinator felt these tasks were quite heavy for her, although she has a part-time assistant. For example she said that:

I have to plan. I have to make timetable. I have to employ the instructors. What kind of sport, when, where and who are the instructors. It is very huge thing...because we are so busy here [Sport office], we don't have time to go to other universities to see [sport services at other universities].

As a suggestion, it would be important to have more staff working in the sport office.

On one hand, they can share assignments with the coordinator. On the other hand, they are able to serve or give help to students, when the coordinator is not available.

As regards to the sport instructors, they teach the sport courses and supervised exercises, and most of them are students. Faculty of Sport and Health Sciences in JYU is the only academic institution in Finland educating experts in the field of sport. Hence, it is easy for Sport office to recruit sport instructors, which can be seen as one kind of an advantage for the University of Jyväskylä.

6.1.4 Organization of sport activities

Organizing sport program for all of the university students and staff is one part of the coordinator's tasks. Although it seems to be quite much for her and the part-time assistant, she is able to manage. She explained that:

I have been this position and done the same work for two years, so I know how to organize all of my work... Something I do now different way than at the my first months and I do also many things different way than the lady who worked as sports coordinator before me...I have some kinds of system to do some things so that previous work helps to do latter work. I am quite systematical.

She also explained concretely the process of organizing sport program and instructors:

I make document about what I am doing, so that other persons can also do it. First, I check what time and which sport halls we can use and when instructors have time to be as instructors. Secondly, I plan the program of such instructors who are more important for us [for such unusual sports we have only one instructor and that's why we have to follow the timetable of the instructor]. Thirdly, I plan the rest of sport program [if possible] so that there are not same kinds of program (e.g. dances) at the same time. The planning process includes many smaller processes and often I have to make changes to the plan, because the puzzle can't be completed.

Sport program

Most students gave very high evaluation for the organizing of the sport program. Two (out of six) interviewees expressed that:

The structure and services of sport program are really good.

I really appreciate that they provided everything for us. I really want to thank them.

The interviews as well as the questionnaire indicated (Figure 8) that, there are 24.8% of the students thinking the sport services are greatly satisfying, and more than half (50.4%) are pleased with it.

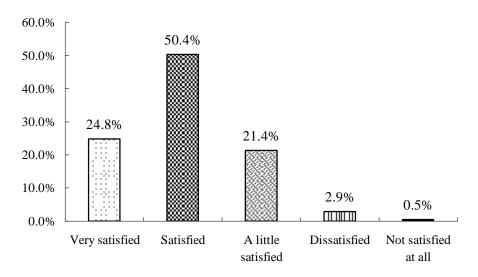


Figure 8. The Satisfaction for Contents of Sport Program (N=206)

Designing the timetable

Because of the special feature of the University of Jyväskylä having the only academic institution in Finland educating experts in the field of sport, there are some obstacles to plan the timetable of sport program for students. The coordinator explained that she must wait for the plans or curriculums of the Faculty of Sport and Health Sciences first, because they are the primary users of the sport facilities and equipment. After that she

can make the schedule for other students to use the sport facilities and equipment. Therefore, the period for most students doing exercise is limited, because of the timetable of sport faculty curriculums and the availability of sport instructors.

Comparing with other universities in Finland might give some good ideas how to make the situation better at JYU. However, it seems impossible for the University of Jyväskylä to do the same as what other universities do, because most of other universities have the same sport program schedule in autumn and spring (academic semester). JYU coordinator of sport office has to make new timetables for sport program every academic season, because the curriculum of the Faculty of Sport and Health Sciences changes every semester.

There are many difficulties in designing the timetable for students doing exercise at the University of Jyväskylä, so it is understandable to get some complaints from the students:

Last semester, I felt all of the exercise could fit my schedule quite well, but this semester, they changed the timetable. For example, normally, they would begin the program from 4 to 5 o'clock, but this semester the time was changed, from 3 to 4 o'clock. So, I have no idea [after my studies] should I stay [university] to wait or go home.

Another interviewee also argued the same problem about the schedule of the sport program:

The problem is now that I have to work here full time [as a PhD student], once I finish my work, I often have to stay later, and until 6 or 7 o'clock, then there is nothing [sport program] anymore in the university. It maybe 3 or 4 o'clock, they have the kind of sport which I like.

It also can be seen clearly from the questionnaire (Figure 9) that more than one third of the international students were not pleased with the schedule of sport program. Comparing with other aspects of sport services such as price, content, instruction, the schedule of the sport program was causing the most dissatisfaction among international students.

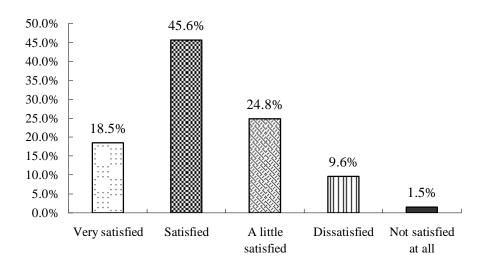


Figure 9 Satisfaction with Schedule of Sport Program (N=206)

6.1.5 Communication material

Currently there are five ways for sport office to publish the sport services to students: giving introduction about university sports during the orientation week to new students, demonstrating sport services on the university website (homepage of JYU), sending flyers, advertising sport events by sending messages on email lists and putting up posters.

The effect of disseminating sport services at JYU can be seen in Figure 10. More than eighty percent of international students were familiar with the sport programs of JYU. This high rate demonstrated the success of JYU in publishing information of the sport program for international students. Only fifteen percent of international students were unfamiliar with university sports. Perhaps they were uninterested in doing

sports/exercises, so they did not care about sport services at all. Based on this supposition, there is one comparison between European students and Non-European students over the familiarity with sport service/programs of JYU (Table 10). Nearly ninety percent of European students were acquainted with sport services, and 71.2% of Non-European students were aware of it. Therefore, the cultures and hobbies of international students may affect the familiarity and participation in sport program. However, from the viewpoint of service management, it can be suggested that communication should be improved in order to attract more sport participators.

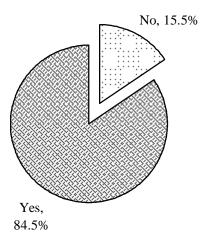


Figure 10. The Familiarity with Sport Services/Program (N=206)

Table 10. Familiarity with Sport Program of JYU by Nationality (N=206)

	Familiarity to know sport program		
	Yes	No	Total
European	132	15	147
Non-European	42	17	59
Total	174	32	206

Note: $X^2 = 11.11$, p<0.05

Both research methods indicated that most international students first got information about sport services from the introduction during the orientation week, when they just came to the university (Figure 11). Therefore, it is worthwhile to know that giving introduction during the orientation week is an effective way to advertise sport services and attract more students to do sports.

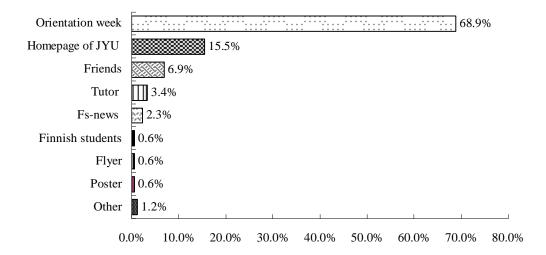


Figure 11. The Channel of First Time to hear about Sport Services/Program at JYU (N=206)

In addition, 15.5% of the subjects got aware of sport services via Internet, and it was also an important channel for students to look for information. The university sports have its own link on the homepage of JYU which makes it easy to find and check information such as items, schedule, and places. One example by an interviewee:

I always check the website [about sport services]. I can also check the open time [from the website], such as swimming pool. If I get the paper [flyer], pretty sure, I always lost it. So, Internet is easier [for me].

Comparing with the above student, there were also numerous students preferring to use flyers for checking sport service information. Another interviewee explained her own situation:

I [usually] got the information [about sport services] from the flyers. Sometimes I have to register for certain kinds of [sport] courses, so I have to check it [the

sport course] first through the internet by the korppi, register for it. I think the information [about sport services] is so many, I prefer to look at the flyer, and make some mark on it, and choose as many as possible, and see whether they can match my schedule or not. That's more efficient for me.

Although the website and flyers are very popular with students for checking sport services, there still are some problems required to be improved. First, some websites about sport services are written only in Finnish, no English versions are available. One interviewee who has studied in the university many years reminded that:

When I just came [to university], I think the information [about sport services] was available on the internet [website]. But it was only part word was translated, and it was much harder to find it. Because somehow you have to go and find through the Finnish website.

Nowadays, some websites about sport services are in English, since university started to emphasize international students more, but updating the English versions is slow. The coordinator frankly said:

When we have some changes in [sport] programs or when we would like to give information about what is happening just now or when we have something special. We don't have that kind of information in English website, because we don't have time to do that kind of website. Although we have the same information in English, the international students have to find it from tens of websites but not from one website.

One reason hindering sport office from updating the English website is that they have so much work to do and they do not have enough time. Another factor is that there is not enough English language support available for the website. The coordinator explained the situation:

I would like to write good English, but I think I cannot do…because I have so many wrong words. Now, we have ... perhaps for one week, we have one person [who is] in the administration office to check our English [website] and we can ask [help]... so I am very happy that somebody who has better knowledge about the language [to] correct it... Sini [part-time assistant] and I have translated it but we haven't studied English [that much]. ... We are still waiting for the help of the translator [now], but he has been very busy with others.

The website of sport services is the main source for international students to get information. If there was no English version or updating is at least one week late, it can be inconvenient for students. Therefore, it might be a good idea to attract students as volunteers to translate and renew the website for international students. Moreover, from the interviews, some advises for the improvement of the website itself were also collected. For example, one interviewee thought that it would be better if there were more pictures showing students doing sports, since it would give a better idea of the sports before joining.

Another interviewee suggested that "It should advertise more university sport services." For the reason that he had not seen the sport services flyer at all, although he had studied at the university half a year. The coordinator of sport office agreed with the advertisement and also got a hint that giving flyers not only in some academic buildings, such as international office, sport building (building L), the main hall of Liikunta, and Agora building, but also it is possible to do advertising in the university restaurants, because they are popular places for most students. In addition, it would be a good idea to give out flyers during the orientation week during which most international students first hear about the university sport services.

6.2 Reliability of information

Reliability in our case concerns the delivering of the accurate sport services. The coordinator of sport office makes the sport services plan including all information about sport program, schedule, location, fees etc., and sport services operate according to this plan the whole semester. If there are some changes, they are published on the website, or the coordinator tries to publish the information some other way. Therefore, most students think the information of sport services is very reliable:

It never happened to me about the wrong information. Always when I went to do sports, it was there.

They are quite reliable. Normally for me, if they have some changes, it will be informed in advanced.

The similar results from the questionnaire shows that approximately 76 percent of the international students were pleased with the reliability of the sport services information, and even 31% of subjects were greatly satisfied (Figure 12).

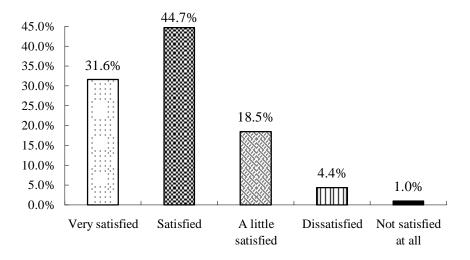


Figure 12 Satisfactions with Information about Sport Program (N=206)

6.2.1 Time

In general the coordinator is able to plan and implement the program well. However, occasional changes are announced on the internet. As mentioned earlier, there is a problem with the language and updating in English. Hence, announcements of changes are not always noticed by international students. One interviewee gave an example:

I decided to go the Break Dancing course, because I just want to learn something new and I haven't seen or done before. I went there in the second time, not the first time, because the first time I was busy. So I went there to the place at the time, and nobody was there. I asked people, nobody had idea of it. People told me this course something was before in the place. After that, nothing. I wait it. Nobody came. It could be better there was a paper outside of the door said this course is not going to happen, because quite nobody wants to do it. I checked the flyer and read again. What's going on here?

In this case, sport office put the "course cancelled" notice on the website, but for international students it was quite difficult to understand the Finnish information. Although there was no English website, it would be possible to put one paper on the door at the time of the course saying "This course was cancelled", or send fs-news to all students about this change.

6.2.2 Location

There are some sport courses organized outside of campus on the city sport fields. If students are interested in those courses, they need to go to the appointed places. However, the problem for the new international students is that they are unfamiliar with the city. Although there are the place names on the flyers, it is still hard for them to find the locations. One example was given from an interviewee:

I remember I was trying to take some classical dance. It was somewhere in a school, and the school was not really in the campus. I really had to search for a

long time... It was difficult to find. Something [sport fields] you really don't know it is out side of campus. Sometimes it was even the name of the room [to be announced], but not the name of the building. It was not understandable. You don't know where the room is. It was the kind of confusing.

With the complaint's coming from students, it is crucial to pay attention to every detail. In this case sport office could use website to link the Jyväskylä city map showing and underlining the special places, and sending the city map during the orientation week on which the sport fields are marked.

6.3 Effectiveness of response

The quality of sport services is improving all the time, and the suggestions and feedback from students play an important role in it. There is a feedback survey about sport services in Finnish for Finnish students done annually, but this survey has not been translated into English. So, there are no official surveys for international students. According to the coordinator it is common for international students to visit sport office and ask questions directly, or give feedback by writing diaries, which is also an assignment for the sport courses. Sport office welcomes international students to give feedback about improving sport services, and there are three easy ways for students to do it: giving feedback via email, telling to the sport instructors, and going to the sport office.

6.3.1 Sport office

The coordinator of sport office emphasizes the importance of feedback about sport services. According to the reactions from students, either she accepts the suggestions and tries to improve the service, or she explains to the student why it is impossible to do so:

I try to fine-tune all the time our program and our systems when I get feedback. I

think we are one of those units in university which really develop the program according to the feedback. We take account of the feedback when we plan the program of the next season.

Nowadays, most feedback comes from Finnish students. Through the investigation, it ca be realized that quite many international students are not active to give suggestions, although they have a lot of good ideas. Hence, it could be worthwhile to pay more attention to the international students' feedback and improve the sport services from the aspect of international students.

6.3.2 Instructor

Usually, students prefer to ask some questions about the exercise. Although most instructors teach sports in Finnish to all students, when some international students ask individual questions, they usually are able to answer in English. No matter if they are doing sport in a big class or in a small group, the supervisors are passional to help students. For example, some scenes were reminded by interviewees that:

[During the aerobic supervised exercise] As long as I asked them [instructors] they are very kind [to answer].

When I went to skiing lessons, it is quite easy to ask something if you didn't understand. Their instruction was very helpful. They show how to do everything.

Also, as showed in Figure 6, "lack of instruction" is among the least important factors hindering physical activity among students at JYU. Although students evaluated the instructor's responses highly, there still was one crucial problem affecting the instruction, the language, which will be discussed later in the part of individual attention.

6.4 Assurance of implementation

Knowledge, abilities, and working experience of the personnel who provide the sport services are a kind of guarantee for students. The coordinator of sport office and the sport instructors were evaluated respectively in the aspect of assurance.

6.4.1 Sport Office

Being a leader of sport office and chief manager of the whole university sport system requires a certain kind of person who possesses professional knowledge of sport management, numerous working experiences in sport field, and strong passion for work and the present coordinator of sport office is this kind of a person:

I studied first here in the Program of Sport Science Administration and Planning [at JYU], I have worked as a volunteer in sport [field] for many years, and have organized many things, and work in different kinds of sports...[Before] I was a software designer, coordinator of the research coordination of the university and Peurunka rehabilitation center. [Now] I have been [working] here [as a coordinator of sport office] two years, and this is the best place for me to work and this is the best task which I have had ever.

The systemic organizing of sport services shows that the coordinator of sport office is qualified for the position. Moreover, the students gave very high evaluation for the organizer of the whole sport system as demonstrated earlier.

6.4.2 Instructors

Most of the instructors who give sport courses and supervised exercises are university students and part-time sport teachers managed by the coordinator of sport office. Although they are neither professionals nor full-time sport coaches, they are responsible for every student. Based on the different situations of the instructors, it might be difficult for the coordinator to supervise them, but she has her own methods:

Some of them [instructors] have some kinds of certification. But most of them they don't have. If I had time, I see how the potential instructor teachers. Most of the instructors come first to me and tell that they would like to be instructors, and they had be as an instructor in some other places. Most of our instructors have studied here for Physical Education. We use these girls and boys first as substitutes when the regular instructor is sick. That's the way the new instructor get experience. I get very quick feedback from participants if he or she [the instructor] could not do the job [if she succeeds or not]. Most of them succeed very well. Now, I have different 50 instructors. When I discuss with the potential instructor before employing them, I get quite good conception of her skills. Until now, I have not made [any] bad mistakes, when I have employed somebody [instructors] to us [sport office].

Furthermore, the assurance of instructors is mainly visible through the instruction during the sport courses. Students seem to believe in the abilities and instructions of sport instructors. For instance, one interviewee told us her experience excitedly:

[When I was in the downhill skiing course] I was really afraid that you know I have to go down the mountain. It is a huge mountain. Wonderful. You know I am afraid to break my neck something. But they [the instructor] really explain[ed] everything very clearly and what was very important. [So] I didn't feel stressed, I feel safe.

The same feedback was also got from the questionnaire (Figure 13), showing that approximately seventy percent of students trusted and was satisfied with the instructions of sport teachers.

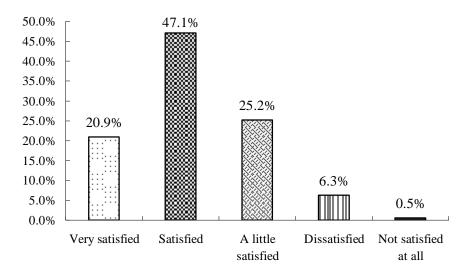


Figure 13. Satisfaction with Instruction of Sport Program (N=206)

6.5 Individual attention

It is common for profit-seeking sport clubs to provide the customers with personal training, while customers are paying higher fees. But the university, which is a non-profit organization, usually delivers public services to students and staff with a low price. Is it possible for university to provide personal services and individual attention? This question presents the dimension of empathy that focuses on the individual attention and care. Evaluating the aspect of empathy in the university sport services, individual sport services and instruction are discussed next.

6.5.1 Individual sport services

With the non-profit nature of the university and student's financial situation, it is almost impossible for university to offer comprehensive individual sport services for students. However, in order to meet various needs of sport participators and attract more students to join sports, the coordinator of sport office has categorized sport services based on demands of different people. For instance, on the university sport website (https://www.jyu.fi/hallinto/yliopistoliikunta/en/fitness/supervised), students can check all details about the sport courses and supervised exercise and even choose the right courses with different skill levels such as easy, medium and challenging.

The design of categorizing sport program is considerate, and definitely shows the empathy in the university sport services. Furthermore, doing more advertisement about individual sport services through non-electronic channels is recommended, because there are quite many students who are not used to checking the sport services on the website.

6.5.2 Personal instruction

The majority of international students were greatly satisfied with the knowledge and courtesy of sport instructors, but there is an evident problem with the language of teaching. When most of the students in the courses are Finnish the sport instructor uses Finnish as the teaching language. Hence, there are complaints from international students who do not understand Finnish very well. During the interviews, four students insisted that the instructors should teach in English:

The instruction language is always in Finnish, although [sometimes] the teacher gave in English. But the teacher just feels uncomfortable, or just to [be] shy. They could normally give me some English instruction, but just key words. They just kept the course in Finnish through all over, and kindly told me something in English. I don't think it is enough for me. For exercise, I can just tell what they are doing from their experience, but superficially I don't know which muscle I am using.

The language barrier was discussed with the coordinator and her opinion is that:

We have some lessons [are taught] in English, and most teachers can speak English. But sometimes, it is difficult [for them] to speak English and Finnish [in the same course]. For example, in yoga, it is difficult to speak everything in two languages when you are doing positions. It is so much to speak and the teacher doesn't have enough time to do it [speak both languages] in English and Finnish. So it is better she do it only in Finnish.

[Moreover,] I think we are here in Finland. It is the privilege of the teachers to speak Finnish in Finland, but they are [also] naturally allowed to speak English, because there are international students. So I think that also when international students go to another country they have prepared to have lessons also only in the language of that country.

If they [instructors] feel they can't speak [the things] well enough in English, they don't have to do that. If the instructors who they can use both languages, it is up to them how they use them, how they think that they manage with the languages.

After analyzing the explanation of the coordinator about the teaching languages, it seems to make sense. But still, it would be a good idea to enhance the English speaking ability of every instructor. If the teacher can teach in English, he/she would be considered higher in hiring. Second, in supervised courses, if a majority is Finnish students, the teaching language is naturally Finnish, but if possible, the instructors should pay more attention to the international students and sometimes give individual help to them in English. Last but not least, the instructors could try to build up groups for the exercises so that the Finnish students would possibly help international students to understand the instructor.

7 CONCLUSIONS AND SUGGESTIONS

The main purpose of this study was to evaluate the sport services for international students at JYU. The main research questions stressed in this study were what is the quality of sport services at JYU for international students and whether they are satisfied with the current situation.

The core findings of this study provided valuable information about sport participation of international students and evaluation for university sport services in JYU. In conclusion, this study shows that most of international students at JYU like doing sport/exercises during their spare time. Male students enjoy sport participation much more than female students. Unsupervised exercise is the highest sport service that international students involved and the most popular sports among them at JYU are soccer, swimming, gym training etc. Furthermore, the result of this research shows that lack of time, weather and lack of partner are the main disadvantages for international students participated in sports/exercise at JYU.

After evaluated the sport services, it shows that JYU has offered very good sport services, including sport program, facilities, equipments, and instructors and so on. Most of international students were quite satisfied with the current sport services. Although sport services had no influence on most international students when they were choosing which university to apply for, it definitely affects the quality of life during their study. Many students were more active in doing sports/exercises at JYU than home which might be because of the ample sport services of JYU.

Despite of the good sport services mentioned, the research found some shortages and problems. First and foremost, the issues caused by language barriers exist in many aspects of sport services. Second, there still were some students who were unaware of the sport program or possibilities to do sports/exercise in JYU. Third, for a few sport activities, the facilities were relatively small and the schedule had some weaknesses as

regards to the time. Finally, the special situation of international students and their needs should be considered more when planning the sport program.

The methodology used in this study provided answers to the research questions, but some weaknesses and difficulties could be noted. Firstly, the respondent rate of questionnaires is rather low. The main reason for that is there are a certain amount of international students who have registered in JYU but are absent indeed. Besides, the invalid email addresses are among the whole contact information. However, this respondent rate is representative for international students of JYU, as well as the right matched of sample distribution in different faculties, are enough to examine the current status of sport participation of international students and evaluate the university sport services. Secondly, due to the fact that the questionnaire was designed not only for evaluating the sport services but also for investigating the sport participation of international students of JYU, individual interviews were carried out. Since the combined use of quantitative and qualitative research methods, it was difficult to narrow and analyze the results into specific categories. Besides, the SERVQUAL scale which used in this research was adopted according to the purposes of this study. Whether it works also well in other researches should be examined in future.

According to our findings, in order to promote the sport services of JYU, the following actions should be taken: 1) Increase the use of English in information as well as instruction of sport program; 2) Enhance the advertisement of sport program in JYU through different ways (e.g. flyer, poster, email lists); 3) Organize more sport events or sport activities to provide opportunities for international students to participate in sports/exercises in JYU, such as "Sport Day", "World Games" and so on; 4) Offer more courses related to Finnish traditional sports or winter sports in English for international students.

REFERENCES

Alexandris, K., Zahariadis, P., Tsorbatzoudis, C., & Grouios, G. (2004). An empirical investigation into the role of the outcome dimension in measuring perceived service quality in a health club context. *International journal of sport management*, 5 (3), 281-294.

Brady, M., & Cronin, J. (2001). Some new thoughts on conceptualising perceived service quality: A hierarchical approach. *Journal of Marketing*, 65, 34-49.

Chelladurai, P. & Chang, K. (2000). Targets and standards of quality in sport services. Sport Management Review, 3 (1), 1-22.

Grönroos, C. (2001). Service management and marketing: A customer relationship management approach (2nd ed.). Chichester: John Wiley & Sons.

Grönroos, C. (2005). What can a service logic offer marketing theory. Helsinki: Swedish School of Economics and Business Administration.

Howat, G., Absher, J. D., Crilley, G., & Milne, I. (1996). Measuring customer service quality in sport and leisure centres. *Managing Leisure*, *1*, 77-89.

International Office of University of Jyväskylä. (2007). Retrieved April 14, 2007, from http://www.jyu.fi/hallinto/intl/en

JOPA ry. (2007). Retrieved April 21, 2007, from http://users.jyu.fi/~mimakole/jopa/indexe.html

Kim, D., & Kim, S.Y. (1995). QUESC: An instrument for assessing the service quality

of sport centers in Korea. Journal of Sport Management, 9, 208-220.

Lewis, J.B., Jones, T.R., Lamke, G., & Dunn, J.M. (1998). Recreational sport: Making the grade on college campuses. *Parks & Recreation*, *33* (12), 72-78.

Nathalie, K. (1999). Sport participation: Differences in motivation and actual participation due to gender typing. *Journal of Sport Behaviour*, 22(3), 360-380.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, *64*, 12-40.

Patton, M.Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park: Sage.

Patton, M.Q. (1997). *Utilization-focused evaluation: the new century text* (3rd ed.). Thousands Oaks: Sage.

Robinson, L. (2004). *Managing public sport and leisure services*. London: Routledge New York.

Rossi, P.H., Lipsey, M.W., & Freeman, H.E. (2004). *Evaluation: A Systematic Approach* (7th ed.). Thousand Oaks: Sage.

Savolahti. O. (May 30, 2001). Why Finland? What makes International Education work in Finland? Retrieved March 30, 2007, from http://www.transworldeducation.com/europe/nfinland.htm

Sport office of University of Jyväskylä. (2007). Retrieved April 11, 2007, from http://www.jyu.fi/hallinto/yliopistoliikunta/en

Student Union of University of Jyväskylä. (2007). Retrieved April 21, 2007, from http://www.jyy.fi/english/subcommittees.php

Study in University of Jyväskylä. (2007). Retrieved April 13,2007, from http://www.jyu.fi/en/study

Subcommittees of JYY. (2007). Retrieved April 20,2007, from http://www.jyy.fi/english/subcommittees.php

University of Jyväskylä. (2007). Retrieved April 11, 2007, from http://www.jyu.fi/en/introduction/education

Wikipedia. (2007). *University of Jyväskylä*. Retrieved April 19,2007, from http://en.wikipedia.org/wiki/University of Jyvaskyla

APPENDIX

Appendix 1 Sport facilities of University of Jyväskylä

Ab.	Name	Address
НН	Hippos Hall	Kuntoportti 3
НЈН	Training ice rink	on the gound floor of the Hippos Hall
KG	Kuokkalan Graniitti	Pohjanlahdentie 12
KJH	Ice stadium at Hippos Hall	Rautpohjankatu 10
KS	The training gym in Building L	Keskussairaalantie 4
MO	Multi-purpose Hall	Kuntoportti 3
N	Sports hall at the Training School (stage)	Yliopistonkatu 1
NA	Sports hall at the Training School	Pitkäkatu 8, door A1
NT	The gym for apparatus gymnastics at the Training School	Yliopistonkatu 1
N1	Sports hall at the Training School, näyttämön puoleinen osa	Yliopistonkatu 1
N2	Sports hall at the Training School, telinesalin puoleinen osa	Yliopistonkatu 1
PS	The gym for ball games in Building L	Keskussairaalantie 4
R	Ryhtilä	the old wooden building next to
		Building S
RS	The gym for rhytmic sports in Building L	Keskussairaalantie 4
TS	The gym for apparatus gymnastics in	Keskussairaalantie 4
	Building L	
UH	Swimming hall Aalto-Alvari	Pitkäkatu 2
UK	Multipurpose Hall	Campus sports field
U1	Multipurpose Hall	The red-brick building next to the
		campus sports field
U2	Multipurpose Hall	The red-brick building next to the
		campus sports field
VS	The gym for gymnastics in Building L	Keskussairaalantie 4

Name Address

Cygnaeuksen koulu Voionmaankatu 18

Hutunki Reinontie 1, Vaajakoski

Jyväskylä Bowling hall Pupuhuhdantie 4

Jyväskylän lyseon lukio Yliopistonkatu 13

Kortepohja comprehensive school Kartanonkuja 4-6

Kuntomaailma Ahjokatu 14-16Torikeskus, 3 floor/Yliopistonkatu 38

Kuntoportti Kauppakatu 30, entrance on Väinönkatu

Laajavuori Laajavuorentie 15

Latu's hut Ronsuntaipaleentie 259

Riihivuori Ski center, Muurame

SATS Jyväskylä Travel Centre, Hannikaisenkatu 20

Tanssisali Lutakko Messukatu 1, 4. floor

Viitaniemi comprehensive school Viitaniementie 20

Viitaniemi Sports park, Kisakatu 18

Appendix 2 Sport Program of University of Jyväskylä

Sports	Supervised Exercise	Courses	Unsupervised Exercise
		Bodyjam	
	Aerobics	Bodypump	
	Circuit Training	Cycling	
Fitness	Gutbusters	Fitness	/
	Step Aerobics	Fitball Trainning	
		Fitness Boxing	
		Pace	
		Spinning	
		Astanga yoga	
	Morning Exercise	Bodybalance	
	Neck/Shoulder Exercise	Yoga	
Well-being	Stretching/Yoga	Exercise Start Goup	/
	Stretching	Neck-back Group	
		Pilates	
		Shindo	
Gym	/	Lower Back Training	Free gym training in the
Training		Gym Training	university training gym
			Volleyball
			Basketball
			Tennis
		Badminton	Table Tennis
Ball		Tennis	Floor Ball
Games	Volleyball	Table Tennis	Futsal
		Squash	Rugby
			Lacrosse
			Ultimate

			Badminton
			Squash
			Bowling
		Cross-country Skiing	
		Downhill Skiing	Ice Hockey
Winter	/	Snowboarding	Rink Bandy
Sports		Long Distance Skating/	Downhill Skiiing
		Trekking	Skating
		Telemark	
	Bailatino		
	Historical Dances		
	Oriental Dance	Ballet for Adults	
Dance	Jazz-dance	Show Dance	Break Dance
	Modern Dance	Streetdance	
	Folk Dancing		
	Ballroom Dancing		
Water	/	Swimming Techniques	Swimming
Sports		Aqua Aerobics	Water Polo
		Aikido	
		Bujinkan Budo Taijutsu	
		Han Moo Do	Aikido
		Hapkido	Bujinkan Budo Taijutsu
Martial		Iaido	Han Moo Do
Arts	/	Ju-jutsu	Taekwondo
		Karate	Taido
		Shorinji Kempo	Taiji
		Taekwondo	
		Taido	
		Taiji	

			Joined Jogging/Running
		Fencing	Juggling
		Wall Climbing	Apparatus gymnastics
Others	/	Experiences in nature	and acrobatics
		Trekking/Hiking	Fencing
		Applied sports	Soft Fencing
			Wall Climbing
			Athletetics

75

Appendix 3 Questions of questionnaire

Questionnaire for evaluation of sport service for international students in JYU

Dear student,

We are doing research on the sport services offered by the sport office of the University

of Jyväskylä (JYU). The main purpose of this research is to check whether the sport

services meet the needs of international students. We would like to receive some

related suggestions from you about how to improve the university sport services. This

study, therefore, can not be completed without the cooperation of international students

and we very much appreciate your contribution.

We can absolutely ensure you that any information given by you will be treated as

strictly confidential and used only for stated purposes of this research. The

questionnaire is anonymous, so you may answer questions frankly without reservation.

If you have any questions concerning the questionnaire, please do not hesitate to

contact us.

Thank you very much for your cooperation!

Yours sincerely,

Yang Liu & Dan Ma (Master students in Sport Science and Management)

yaliu@cc.jyu.fi; dama@cc.jyu.fi

Department of Sport Science

University of Jyväskylä

Please tick the appropriate box after each question (only one tick per answer unless otherwise specified):

1. Sex ?	☐ Female ☐ Male					
2. Nation	nality?					
3. How le	ong have you been a student at JYU?					
	Less than 3 months 3~6 months 6~12 months					
	1~2 years					
4. What i	s your right to study at JYU?					
	Degree student					
5. In whi	ch faculty are you enrolled?					
	Faculty of Education Faculty of Sport and Health Sciences					
	Faculty of Social Sciences					
	Faculty of Humanities					
	Faculty of Information Technology					
6. How n	nuch do you enjoy participating in sport/exercise in your spare time?					
	Very much					
7. Do you	you feel that you are more or less physically active at JYU than in your own country?					
	More active Less active No change					
8. Are you familiar with the sport services/program of JYU?						
	Yes No					
If yes, how did you first find out about sport services/program at JYU?						
	During orientation week					
	From your tutor From Finnish students From friends					
	From a flyer					

9. How often do you par	ticinate in the f	allowing aspect	s of the university	sport program?	
3. How often ao you par	Quite often	Seldom	Never	I was unaware of this possibility	
Unsupervised exercise					
Supervised exercise					
Sport courses (require a separate fee)					
Sport events					
Courses with credits					
10. What sport activities	do you particip	ate in at JYU? ((you may tick mo	re than one box)	
Ball games	☐ Da	nce		Fitness (e.g. Aerobics)	
Gym training	☐ Ma	rtial arts		Water sports	
☐ Winter sport	☐ We	ll-being (e.g. Str	retching)	None of the above	
Other	-				
Of these what is your favourite sport/exercise? (please specify the exact sport/exercise)					
_	_	to you when you	u were choosing	which university to apply for	
exchange/degree studies Very important	,	Important		Some importance	
A little importance Not important at all					
12. Which of the following factors do you find to be disadvantages in doing sport/exercise at JYU?					
(you may have more tha	_				
Lack of time	∐ Lack	of a partner	Lack of ins	struction	
Price	Press	sure of study	Lack of in	formation about possibilities	
Weather	Lang	uage barrier	None of th	e above	
Other	_				

13. Have you heard of or tried the following sports at JYU?						
	Tried oft	-	Tried several times	Tried only once	Only h	
Cross-country Ski	ing					
Downhill Skiing						
Snowshoeing]				
Snowboarding						
Skating]				
Ice Hockey						
Finnish Baseball						
Nordic Walking						
Roller Skating						
Floorball						
Canoeing						
Were you aware	that the sport	office of J	YU offered th	e possibility t	o try the ab	ove sports?
Yes, I have to	ried some/one	of them.	Yes, b	ut I haven't tr	ried 🗌	No, I was not aware
14. How satisfied are you with the following aspects of the sport services at JYU?						
V	ery satisfied	Satisfied	A little sa	tisfied Dis	satisfied	Not satisfied at all
Information						
Instruction						
Contents						
Schedule						
Price						

15. How would you evaluate the following sport facilities at JYU?					
	Excellent	Good	Average	Poor	Don't know the facility
Hippos hall					
Multi-purpose hall					
Swimming hall					
Ryhtilä (building R)					
Campus sports field (near Lozzi)					
Training ice rink at hippos hall					
Gym for ball game (building L)					
Training Gym (building L)					
Gym for rhytmic sports (building L)					
Gym for apparatus gymnastics (building L)					
Gym for gymnastics (building L)					
16. Do you have any other comm	nents about	the sport	services of	f JYU? P	lease give your
opinion/suggestions here?					

THANK YOU VERY MUCH FOR YOUR PARTICIPATION!

Appendix 4 Questions of interview

Questions for international students of JYU

- 1. In which faculty are you enrolled? Are you a degree student or an exchange student? How long have you been studying at the University of Jyväskylä?
- 2. Do you like to exercise/ play sports?

YES	NO	
1) What sports/exercises do you like to do?	1) Why not?	
2) What are your reasons for exercising/playing?		

- 3. When you were deciding which university to apply to for exchange/degree studies, did you collect information on the sport services of the different universities? In the other words, were the sport services an important influence on your choice of university?
- 4. Have you ever used the sport services of the University of Jyväskylä?

YES	NO
1) Which service?	1) May I ask why?
2) Why did you choose these sport services?	2) Do you feel that you are
	sufficiently informed about the
	university sport services?
	(If yes) When and how did you
	first find out about the sport
	services?
	(If no) Have you tried to find
	out about the sport services on
	offer?

3) How do you usually get information about the sport services (time, location, content)? When and how did you first find out about the sport services of the University of Jyväskylä? Do you find that the information given about sport services is reliable? 4) How do you feel about the sports equipment and facilities of our university? Are they practical and easy to use? Do the facilities/ equipment allow you to reach your exercise/ sports goals? 5) When you participate in supervised exercises/sport courses etc, does the coach/instructor offer the correct instruction and useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport Office? Could you give us an example?		
When and how did you first find out about the sport services of the University of Jyväskylä? Do you find that the information given about sport services is reliable? 4) How do you feel about the sports equipment and facilities of our university? Are they practical and easy to use? Do the facilities/ equipment allow you to reach your exercise/ sports goals? 5) When you participate in supervised exercises/sport courses etc, does the coach/instructor offer the correct instruction and useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	3) How do you usually get information about	
the sport services of the University of Jyväskylä? Do you find that the information given about sport services is reliable? 4) How do you feel about the sports equipment and facilities of our university? Are they practical and easy to use? Do the facilities/ equipment allow you to reach your exercise/ sports goals? 5) When you participate in supervised exercises/sport courses etc, does the coach/instructor offer the correct instruction and useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	the sport services (time, location, content)?	
Jyväskylä? Do you find that the information given about sport services is reliable? 4) How do you feel about the sports equipment and facilities of our university? Are they practical and easy to use? Do the facilities/ equipment allow you to reach your exercise/ sports goals? 5) When you participate in supervised exercises/sport courses etc, does the coach/instructor offer the correct instruction and useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	When and how did you first find out about	
Do you find that the information given about sport services is reliable? 4) How do you feel about the sports equipment and facilities of our university? Are they practical and easy to use? Do the facilities/ equipment allow you to reach your exercise/ sports goals? 5) When you participate in supervised exercises/sport courses etc, does the coach/instructor offer the correct instruction and useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	the sport services of the University of	
sport services is reliable? 4) How do you feel about the sports equipment and facilities of our university? Are they practical and easy to use? Do the facilities/ equipment allow you to reach your exercise/ sports goals? 5) When you participate in supervised exercises/sport courses etc, does the coach/instructor offer the correct instruction and useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	Jyväskylä?	
4) How do you feel about the sports equipment and facilities of our university? Are they practical and easy to use? Do the facilities/ equipment allow you to reach your exercise/ sports goals? 5) When you participate in supervised exercises/sport courses etc, does the coach/instructor offer the correct instruction and useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	Do you find that the information given about	
and facilities of our university? Are they practical and easy to use? Do the facilities/ equipment allow you to reach your exercise/ sports goals? 5) When you participate in supervised exercises/sport courses etc, does the coach/instructor offer the correct instruction and useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	sport services is reliable?	
practical and easy to use? Do the facilities/ equipment allow you to reach your exercise/ sports goals? 5) When you participate in supervised exercises/sport courses etc, does the coach/instructor offer the correct instruction and useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	4) How do you feel about the sports equipment	
Do the facilities/ equipment allow you to reach your exercise/ sports goals? 5) When you participate in supervised exercises/sport courses etc, does the coach/instructor offer the correct instruction and useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	and facilities of our university? Are they	
reach your exercise/ sports goals? 5) When you participate in supervised exercises/sport courses etc, does the coach/instructor offer the correct instruction and useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	practical and easy to use?	
5) When you participate in supervised exercises/sport courses etc, does the coach/instructor offer the correct instruction and useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	Do the facilities/ equipment allow you to	
exercises/sport courses etc, does the coach/instructor offer the correct instruction and useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	reach your exercise/ sports goals?	
coach/instructor offer the correct instruction and useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	5) When you participate in supervised	
useful help for you? Do you have any other comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	exercises/sport courses etc, does the	
comments about this? 6) Are you satisfied with the speed and efficiency of sport services offered by Sport	coach/instructor offer the correct instruction and	
6) Are you satisfied with the speed and efficiency of sport services offered by Sport	useful help for you? Do you have any other	
efficiency of sport services offered by Sport	comments about this?	
	6) Are you satisfied with the speed and	
Office? Could you give us an example?	efficiency of sport services offered by Sport	
	Office? Could you give us an example?	

- 5. Which kinds of sports/exercises do you like to do? For example, do you like to try new sports which you have not tried before, or do you like to do some activities in a nature environment/ in a group/ alone etc?
- 6. Have you ever given feedback to the sport office of our university? Were you satisfied with their response?

Questions for sport coordinator of JYU

- 1. Do you enjoy your position in charge of sport programs for students at the University of Jyväskylä?
- 2. Generally, what are your main tasks as the sport coordinator?
- 3. The University of Jyväskylä is the only one in Finland educating experts in the field of sport and health science. Compared with other universities in Finland, what are the main advantages of our university in offering sport services for students? Are there any disadvantages?
- 4. What is your approach to the organization of sport services at the University of Jyväskylä?
- 5. Do you think it is important to categorize sport services based on the different demands of different people? In this respect, how do you categorize sport services in our university?
- 6. From the sport services point of view, what do you think are the main differences between Finnish and international students?
- 7. Given these differences, how do you manage to offer sport services that meet the needs of both Finnish and international students in the University of Jyväskylä?
- 8. We found out through our research that there is an annual feedback report from Finnish students about the sport services of the University of Jyväskylä. We are wondering, is there a similar feedback process for the international students?

- 9. Have there been times when international students expressed the need to improve the quality of sport services and to make them more suitable for international students?
- 10. Are there any changes made to the sport services, based on the feedback and suggestions from students?
- 11. We have already asked some international students for their opinions about the sport services and we were surprised to find that some students knew nothing about the university sports program, what is your reaction to this?
- 12. In your opinion, what changes or developments should take place regarding sport services for international students? Are there obstacles you anticipate in making such changes?
- 13. Do you think the information on sport services offered by the sport office is reliable?
- 14. What is the process for repairing and updating sports equipment/ facilities at the University of Jyväskylä?
- 15. What kind of training does the sports office offer to its personnel?
- 16. What fist aid equipment/ do you have in place in case of injures/ accidents?

Questions for the coordinator of international office of JYU

- 1. When a university is evaluated, are the sport services for students a main element to be considered?
- 2. What role do sport services play in your plan for attracting international students to the University of Jyväskylä?
- 3. How important do you feel sport activities are in the lives of students at the University of Jyväskylä? Especially for international students?
- 4. Regarding the international students, do you know of any previous research about the sport services offered to them in our university?
- 5. How do international students feel about the sport services at our university? Have you heard any international students' opinions or suggestions regarding the sport services of the University of Jyväskylä?

Questions for sport organizer of JYU

- 1. Where are you from? What faculty are you studying in? Are you a degree student or an exchange student?
- 2. We heard that you organize many sport events in our university, could you tell us about some of them?
- 3. What were your aims in organizing these events?
- 4. What were the results of the events which you organized? Did you accomplish your aims?
- 5. Could you tell us about the international students who participated in these events? Were there a lot or quite few?
- 6. When you organized sport events, did you have some difficulties in dealing with both Finnish and international students? (If yes) How did you deal with these difficulties?
- 7. How would you change the current sport program or events to attract more international students?