# The internationalization of scientific research on table tennis and the role of Japan:

The details and the issues in the International Journal of Table Tennis Sciences, No.1 (1992)

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## Introduction

This paper aims to explain the issues in *the International Journal of Table Tennis Sciences*, No. 1 (1992) and assess past and present scientific research on table tennis. <sup>1)</sup> This paper also seeks to explain the rationale and process for publishing *the International Journal of Table Tennis Sciences*, as well as the steps taken to obtain an International Standard Serial Number (ISSN) for the journal. The first issue of this scientific journal was intended to be a platform for the proceedings of the International Congress of the ITTF, Sports Science Committee (ITTF-SSC), held in Fukaya in 1991. It was spearheaded by the late Prof Nobuo Yuza and several members of the editorial board, as well as the JTTA Sports Science and Medical Committee. <sup>2)</sup> At this international congress approximately 25 years ago, as far as we can remember, issues related to international studies by the ITTF-SSC were raised by Mr. Ogimura, Dr Dolinar, Prof Yuza, and many other researchers and scholars. We think this early initial stage of international research was successful because of the presence of the ITTF Sports Science and Medical Committee at the international levels. It is important for us to consider past and present sports science research on table tennis.

# 1. Background of the Second ITTF Sports Science Congress, 1991

In making arrangements for the Second ITTF Sports Science Congress in 1991, we obtained the cooperation of a great number of people. The first stage of the arrangements dates back to 1989, when the First ITTF Sports Science Congress and the Fortieth World Table Tennis Championships were held in Rome, Italy, and in Dortmund, Germany, respectively. Although it had already been decided that the next World Table Tennis Championships would be held in Makuhari-city, Chiba-pref. Japan, the ITTF Sports Science Congress had to find a place or sponsor university in the country. Therefore, Mr. Ichiro Ogimura, president of the ITTF, asked Mr. Bungo Matsukawa, the chief executive officer(substantially president) of the Saitama Institute of Technology (SIT), to provide the site and sponsorship for the congress. SIT is known as a unique college that approaches technology and education in its own way based on Buddhist philosophy. Mr Matsukawa and Mr Yukinobu Sato, who was secretary general of SIT's executive board, accepted the proposal, and the substantial preparations for the Second ITTF

Sports Science Congress. And then the preparations began under the direction of Prof Nobuo Yuza, Chairman of the JTTA Sports Science and Medical Committee at that time.

To prepare Prof Yuza's office of research institute(Chukyo Women's University) to serve as the executive office of the congress, a telephone, a fax machine, and other necessities were installed. He notified table tennis scientists around the world about the upcoming second congress and asked them to participate. At first, very few agreed to participate or submit abstracts. Prof Yuza, however, devoted himself to attracting scientists and researchers, and continued to identify suitable people for the keynote address and general presentation. In December 1990, we formally set up the executive board for the Second ITTF Sports Science Congress. It consisted of seven functional divisions that oversaw programmes, site preparation, organizing a friendship table tennis tournament for the participants, general affairs and accounts, recording, lodging, and reception.<sup>3)</sup>

On 22 and 23 April, general presentations were given on sports medicine, sociology, psychology, training, physiology, and biomechanics. After these were concluded, the scientists were divided into groups according to discipline and then discussed problems and exchanged notes. The reports were recorded in *the International Journal of Table Tennis Sciences*, No. 1 (1992). The chairman of each section prepared a summary of the meeting as well as a questionnaire to be administered to players at the Forty-First World Table Tennis Championships. The questionnaire results are presented in *the International Journal of Table Tennis Sciences*, No. 1. In this way, the late Prof Yuza and Mr Ogimura aimed to promote scientific approaches to table tennis. 5)

# 2. The late Mr. Ogimura, the late Prof Yuza, and the Publishing of the International Journal of Table Tennis Sciences

At a general meeting held at 08:30 on 24 April, Mr. Ogimura proposed establishing an International Academy of Table Tennis Sciences (ATTSc) under the supervision of the ITTF to promote the scientific study of table tennis. The proposal was seconded by the other participants. Prof Z. J. Dolinar was named chairman of the Academy, with Prof Paul Shiltz and N. Yuza as research coordinators. At the present circumstances, there is not the Academy. However, the publication of *the International Journal of Table Tennis Sciences* inaugurated a fruitful period for the congress.

Prof Yuza provided a detailed description of the submission process in the journal's first issue in 1992. Scientific papers on table tennis were divided into two categories: original investigations and other reports. After papers were presented at the congress, steps were taken to submit them to Prof Yuza's editorial office. The submitted papers were peer reviewed, and the results were sent to the respective authors. After a number of revisions, the editorial board

accepted the papers.

Given the high-level content of international table tennis studies at that time, it is difficult to divide these papers into original investigations and other reports. I underestimated the arbitrariness of Prof Yuza's selections. However, it is believed that we can sort the original investigations and reports into germinal-stage studies, studies presenting new data or figures, reports on the present state of research, and so forth. Thus, other reports are also important for future scientific studies on table tennis. These could include reports such as medical department studies, physical fitness test data, nutrition studies, reports on international-level players in the championships, anti-doping reports, and so on. These would contribute significantly to table tennis science.

In establishing an international academy for table tennis, including the publication of *the International Journal of Table Tennis Sciences*, Mr. Ogimura made plans to apply for the journal's ISSN. He convinced the ITTF office, located in Hastings in the UK, to apply for an ISSN to the ISSN UK Centre under the auspices of the British Library. Print copies of the journal's first and third issues (from 1992 and 1996) were deposited in the British Library. Initially, 300 copies of the three issues were printed and sent to members of the ITTF-SSC. And Prof Yuza tentatively had made draw up 'Notes on Contributors' which was recorded in the International Journal of Table Tennis Sciences, No. 1 (1992). <sup>8)</sup> Then, in 2010, Prof Dr Yutaka Tsuji became the journal's editor-in-chief beginning with its sixth issue, which was the first to be published digitally. Today, electronic publication of the journal continues on ITTF's website, with the active support of Prof Miran Kondrič and Dr Jean François Kahn, as well as other ITTF-SSC members.

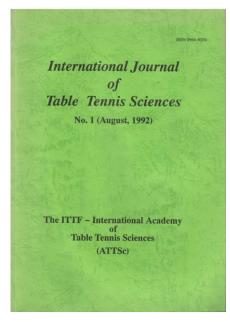


Figure 1. IJTTS No.1

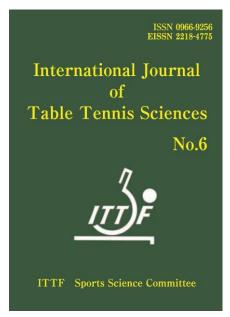


Figure 2. IJTTS No.6



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Figure 3. The contents for the electric version of IJTTS, No.6

# 3. Issues in the International Journal of Table Tennis Sciences, No. 1 (1992)

The 1st Sports Science Congress in Rome had only 27 participating members in total.<sup>9)</sup> When it was decided that the 2nd Sports Conference would be held in Fukaya, Saitama-pref, Japan, Prof. Nobuo Yuza, the person in charge of organizing and managing the conference, quickly formed an organizing committee to prepare for this second congress. Ultimately, a list of the participants and those involved in administration of the congress - 164 people in all - was compiled for the 2nd congress. At this time, affiliating with the ITTF Sports Science Committee and promoting scientific research related to competition as an IF was strongly advocated by Mr. Ichiro Ogimura, who at the time was the president of the International Table Tennis Federation. Therefore, it was decided that the Sports Science Committee was to be founded specifically as an international council dedicated to one of event for table tennis. The ITTF did, however, already host at that time a Sports Science Committee; therefore, the new council was given the title of 'International Academy of Table Tennis Sciences'. In this way, table tennis can perhaps be considered to have been a step ahead of other sports event at the time, with its unique precedent of having commissions and academic societies affiliated with an international association focussed on scientific research. Both Mr. Ogimura and the congress chairman, Prof. Yuza, took great pride in this fact. As the host organisation for the congress, the Saitama Institute of Technology has played a major role in providing the support needed to sustain the congress, including sufficient resources and staff for its operation. Mr. Ogimura and Prof. Yuza have also arranged for the executive committee of the International Academy of Table Tennis Sciences to be housed at the Saitama Institute of Technology after the congress. However, questions lingered as to whether the organization's academic format meant that it would continue its work after the congress as an academic body. The foremost unresolved questions concerned the creation of congress proceedings and, as an academic body, the publication of a journal compiling international research findings. Publishing a journal is a two-pronged task, requiring both editing and publishing. As for the former, an editorial board requires review standards in order to provide peer review and determine whether articles are suitable for publication. For the sake of convenience, the editorial board determined that the material to be published would be divided into one of two categories: original investigations and reports. The distinction between 'original investigations' and reports has been explained for convenience, but the classification is also performed by the editorial board via a review process, conducted according to scientific research standards. Thus, the classification of articles has also been facilitated. Nowadays, papers with more practical content have begun to be reviewed and evaluated internationally; therefore, creating a category for practical research and coaching reports - papers on coaching and practical matters such as instruction of technique and tactics - might not be a bad idea.

# Table 1. The title pages and the Editorial Board Members of the LJTTS, No.1(August, 1992)

International Journal of Table Tennis Sciences is published biennially after congress of International Academy of Table Tennis Sciences.

This Journal contains original investigations and other reports on table tennis; and also serves as a proceeding of each congress.

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Dewey:	796.3461	
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# 4. The internationalization of scientific research on table tennis and the role of Japan

As for the printing of the journal, a printing office at the University of Tokyo campus that would undertake the project at a reasonable price was selected. Why the University of Tokyo? This is because a friend of Prof. Yuza, Prof. Kamon Nitagai, worked for that university (and later became its vice president) and extended us an invitation. The number of copies to be printed was set at 300, assuming that it would be distributed to each committee member and participant at the international congress. The greatest unresolved issues at this point were the content of the booklet, the number of pages, the creation of a colophon for publication, and whether the publication could be officially recognized as a scientific journal. Any publication issued by an international scientific society must be circulated internationally. The executive offices of the ITTF were in Hastings, England; therefore, a petition was sent to the British Library. ITTF officials in England had continued our hard work.

However, in order to obtain an International Standard Serial Number (ISSN), a contact is required at a national library or, in the case of Japan, the National Diet Library. In order to obtain an ISSN from the British Library in England, a directive from Mr. Ogimura was needed. In addition, for that directive from Mr. Ogimura to be released to the office in England, we required an appropriate reason and basic explanation. Prof. Yuza and Prof. Hiroaki Sakakibara contacted Mr. Ogimura directly; we recall that we met in Mitaka-city, Tokyo, where we provided an explanation of the circumstances and submitted a request. Currently, as outlined in Table 1, No. 1 and 3 of *the International Table Tennis Sciences* are found in an electronic search of Main Catalogue of the British Library. Why Vol. 2 is not in the library's possession is unclear.

The academic publication of the International Academy of Table Tennis Science had emphasized the current state of international competition and scientific understanding of the sport. The 2nd Congress took at its main topic the use of yellow-coloured table tennis balls. Research results of great interest were announced, reporting that making table tennis balls yellow had an impact on player response time.<sup>10)</sup>

The increase in player's physical reaction speeds due to the use of these coloured table tennis balls became a central topic of the 2<sup>nd</sup> Congress. Scientific data were presented on the phenomenon, and standards were suggested. To better adhere to academic and scientific research standards, it was necessary to confirm the reproducibility of scientific data and present objective research methods. Currently, remarkable progress is being made toward these goals. If our knowledge of these topics could be deepened through the exchange of ideas and question-and-answer sessions between researchers and the participants, then it could be said that we were sufficiently accomplishing our role as a scientific society. Technological innovations and new tactics and techniques had directly influenced the competition results of participating teams from a variety of nations; therefore, it was perhaps only natural to want to keep the research findings confidential and use them to elevate the international competitiveness of Japanese players. Research staff from individual national scientific societies are also compelled to produce research results that contribute to the improvement of their own country's level of competitiveness, and they must be eager to produce research findings that contribute directly to the victories of players from their own nations. It was noted, however, that that the need to adopt a global perspective on our shared interests and the development of table tennis as a whole, without prioritising the competitiveness of any one individual nation, transcended these concerns - as did the fact that the ITTF as an individual sports federation founded an international congress dedicated to medical science. Above all, while a great deal of arbitrary data exist, the motion analysis of player techniques and an accurate grasp of the fitness and the strength and endurance of players at various levels has unfailingly contributed to the improved accuracy of research data at international congress. The topic that particularly arrested Mr. Ogimura's attention was identifying the methods and conditions that help in the discovery of future young talent. Player nutrient intake and the field of sports dietetics have also both been established as new areas of interest for the ITTF's Sports Science Committee at that time. This could be called prescient. Furthermore, regarding the 2nd International Congress's Publication Division, as with the 1st Congress in Rome, an overview was provided of the international congress findings and the status of research activities in the respective divisions of Medicine and Physiology (cardiorespiratory, the muscle-tendon complex, and physical strength), Biomechanics (kinematics, physical mechanisms, and the development of tools), and Psychology (player motivation and mental training). Furthermore, as observed in a keynote speech by Dr Yoshio

Kuroda at the time an authority on the state of and issues regarding anti-doping measures-doping prevention had become a pressing issue for the ITTF. The challenges of nutritional science and player nutrient intake, to be tackled by the new divisions, were also mentioned.<sup>11)</sup>

For the 3rd Congress, a Comprehensive Division was also added. Additionally, evidence of attempts by the ITTF's Sports Science Committee to gain information through an international survey via a questionnaire distributed to players in various nations is evident in No.1 of *the International Journal of Table Tennis Science*.<sup>12)</sup> The survey was supervised by Mr. Ogimura and covered various subjects such as the existence or absence of player sports injuries; information about player nutrition, beverages, physiological inspections, and doping; sports psychology; biometrics; and training. The results of the survey were compiled into a report.

## Conclusion: Current and future scientific studies

Players compete in table tennis championships all over the world. International research on table tennis science has progressed, and there is a focus on further development. After Mr. Ogimura passed away, ITTF's next president, Mr. Xu Yinsheng, also had been displayed a deep understanding of the development of table tennis sciences.

Finally, there is our proposal to scientists and researchers on table tennis. It is believed that new scientific knowledge can be gained by publishing in *the International Journal of Table Tennis Sciences* which were included as a second contribution, the reprinted papers of the original investigation already have been written up in other Journal in their respective specialization. Are there questions or opinions that arise? Should the second contributions be permitted? Dr Miran kondrič has long devoted himself to promoting the achievements of the Sports Science Committee, along with the Racket Sports Congress. Finally, we would like to express deep gratitude to Dr Miran kondrič, Dr Jean François Kahn, Dr Yutaka Tsuji, and Dr Shiro Matsuo, and other members of ITTF Sports Science Committee. And We also would like to express deep gratitude to Dr Kazuto Yoshida, and other members of JTTA Sports Science and Medical Committee.

# [Notes and References]

- 1) International Table Tennis Federation, International Academy of Table Tennis Sciences (ATTSc), the International Journal of Table Tennis Sciences, No.1,1992, Hastings
- 2) *ibid.*, p.ii. Editorial Board Members were the whole 52 members had consisted (1)Executive Board Members, (2) International Editorial Board and (3) Advisory Editorial Board.
- 3) *ibid.*, pp.171-173. 'Executive Board Members at the 2<sup>nd</sup> ITTF Sports Science Congress in Fukuya, Japan'

- 4) Hiroaki Sakakibara(1992) 'The Process and Successful Results of the 2<sup>nd</sup> ITTF Sports Science Congress', in; International Table Tennis Federation, International Academy of Table Tennis Sciences (ATTSc), *the International Journal of Table Tennis Sciences*, No.1, 1992, pp.185-186.
- 5) op.cit., the International Journal of Table Tennis Sciences, No.1,1992, pp.171-173. 'Executive Board Members at the 2<sup>nd</sup> ITTF Sports Science Congress in Fukuya, Japan'
- 6) *ibid.*, pp.171-173. 'Executive Board Members at the 2<sup>nd</sup> ITTF Sports Science Congress in Fukuya, Japan'
- 7) ibid., pp.iv-v. 'Contents of the International Journal of Table Tennis Sciences, No.1, 1992'
- 8) ibid., pp.219-220. 'Notes on Contributors'
- 9) ibid., pp.143-144. 'Report to ITTF from the ITTF Scientific Congress(in Rome, 1989)'
- 10) David J.Rogers(1992) *et al.* 'Yellow or White? A Preliminary Investigation into the Effects of Ball Colours in the Players Speed of Response in International Table Tennis', in; International Table Tennis Federation, International Academy of Table Tennis Sciences (ATTSc), *the International Journal of Table Tennis Sciences*, No.1, 1992, pp.23-26.
- 11) Yoshio Kuroda(1992) 'The problem of Doping', in; International Table Tennis Federation, International Academy of Table Tennis Sciences (ATTSc), the International Journal of Table Tennis Sciences, No.1, 1992, pp.165-169.
- 12) The ITTF Sports Science Committee(1992) 'The ITTF Questionnaire of Elite Athletesat 41<sup>st</sup> World Table Tennis Championships in Chiba, Japan', in; International Table Tennis Federation, International Academy of Table Tennis Sciences (ATTSc), *the International Journal of Table Tennis Sciences*, No.1, 1992, pp.191-208.