Shanghai University of Sport

2025 English-Taught Master's Program in PSYCHOLOGY AND COGNITIVE NEUROSCIENCE IN SPORT AND EXERCISE

Program Introduction

The English-Taught Master's Program in Psychology and Cognitive Neuroscience in Sport and Exercise is based on psychological science and adopts the research methods and techniques of cognitive neuroscience, aiming at exploring the occurrence, developmental patterns and formation mechanisms of psychology and behavior during sports, focusing on the occurrence mechanisms, early diagnosis, assessment and sports prevention of sports-related diseases at the neurophysiological level. The program provides a standard schooling period of 2 years. Students must obtain 22 credits for their graduation. The maximum number of students enrolled under the program is 5.

Deadline for Application

Chinese Government Scholarship: February 28, 2025
University President’s Scholarship: April 30, 2025

Eligibility

- Applicants shall be non-Chinese citizens with regular foreign passports, who shall be physically and mentally healthy and aged under 35.
- Applicants shall have the disciplinary background and research capabilities required for their preferred program.

- Applicants applying for the program shall have obtained the bachelor's degree.

- Applicants shall at least satisfy one of the following requirements for language proficiency:

1) Applicants' native language is English;

2) Applicants can provide valid IELTS or TOEFL scores (IELTS scores not lower than overall band 6.5 or TOEFL scores not lower than 80);

3) Applicants shall have obtained a bachelor's degree or above in another country, and such program is taught in English.

- The GPA of the previous period of study shall not be lower than 3.0, or the average score of all subjects shall not be lower than 75 points.

- Applicants shall have no criminal records.

Application Documents

- One copy of the valid passport
- One copy of your graduation or degree certificate (If the original is issued in languages other than Chinese or English, please provide a notarized translated copy in Chinese or English.); if the applicant is a new graduate, please submit one pre-graduate certificate presented by one's school.
- One copy of the academic transcript for the undergraduate period (If the original is issued in languages other than Chinese or English, please provide a notarized translated copy in Chinese or English.)
- One copy of the valid IELTS or TOEFL certificate or originals of any other certificate proving equal language proficiency for students not native speakers of English
- One learning plan or research proposal written in English
- One resume written in English, including educational and working experience, research results, and learning plans
- Recommendation letters in English from two professors or associate professors

- Tutor's Pre-acceptance Letter (if any)
- Previous research results/academic papers (if any)
- One copy of the Foreigner Physical Examination Form
- One video (MP4) with a length of less than 3 minutes to introduce yourself in English
- Certificate of No Criminal Records or Commitment on No Criminal Records
- Statement of Financial Support (Can sign the Statement of Financial Support provided by the university, see the attachment).
- Payment certificate for the registration fee (CNY 500 or USD 80)

Application Process

Step 1: Online application

Log in to "Shanghai University of Sport - International Student Service System" (http://admission.sus.edu.cn) to register, fill in the registration form, upload the required documents (in electronic version), and submit their applications.

Step 2: Pay the registration fee

The registration fee is USD 80 or CNY 500 (which will not be refunded once paid.), which shall be paid online or remitted to Shanghai University of Sport:

Account name: Shanghai University of Sport

Account number: 033267-00881002983

Bank of deposit: Xiangyin Sub-branch, Shanghai Branch, Agricultural Bank of China

Address: No. 650, Qingyuan Ring Road, Yangpu District

- *Please state the passport name of the applicant and "registration fee" when making a remittance.*

Scholarship

Once admitted, applicants of the program will receive the Chinese Government Scholarship or President's Scholarship for International Students of Shanghai University of Sport subject to the following funding criteria:

1. Students granted with the scholarship are exempted from the tuition, on-campus accommodation expenses, and comprehensive medical insurance expenses.

2. Students granted with the scholarship will receive living expenses in an amount of CNY 3,000/month.

3. The Excellent Student Scholarship is established to provide one-time reward to students achieving high-level research results during their academic year.

4. Students will receive financial support for round-trip airfare (economy class) incurred for one oral presentation at an international conference.

Note：Chinese Government Scholarship applicants who have been successfully admitted can receive a maximum of three years of full scholarship, while the University President's Scholarship only covers maximum two years.

Review and Acceptance Process

1. Students file applications online.
2. Personnel of the Office of International Students Services preliminarily review application documents for integrity and validity.
3. Colleges organize academic reviews and interviews for applications who have provided complete application documents.
4. The International Student Enrollment Leading Group finalize the list of acceptance
5. Personnel of the Office of International Students Services announce the pre-admission results.
6. Personnel of the Office of International Students Services send pre-acceptance notices to accepted applicants and prepare formal acceptance documents.

Contact Us

Office of International Students Services, Shanghai University of Sport

Room 115, Building No. 4, Lane 531, Qingyuan Ring Road, Yangpu District, Shanghai,

the People's Republic of China

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To check more details of the program description, please refer to the annex below.

Annex:

Introduction of the English-Taught Master's Program in Psychology and Neuroscience in Sport and Exercise

I. Introduction of the Program and Research Interest

The English-Taught Master's Program in Psychology and Cognitive Neuroscience in Sport and Exercise is based on psychological science and adopts the research methods and techniques of cognitive neuroscience, aiming at exploring the occurrence, developmental patterns and formation mechanisms of psychology and behavior during sports, focusing on the occurrence mechanisms, early diagnosis, assessment and sports prevention of sports-related diseases at the neurophysiological level.

II. Cultivation Requirements and Enrollment Quota

The standard schooling period is 2 years, and the maximum study period (including suspension of study) is 5 years. Students shall obtain 22 credits for their graduation, including 6 credits for compulsory degree courses, 10 credits for compulsory liberal courses, 4 credits for non-degree elective courses, and 2 credits for compulsory practice. The number of students enrolled under the program is 10.

III. Curriculum & Introduction

(I) Compulsory courses (2 credits/course, 6 credits in total)

1. China Overview (Jia Ting)

This course provides students with a systematic understanding of Chinese culture and society from different perspectives, including geography, population, ethnicity, politics, economy, philosophy, history, art, and international relations, through four different thematic units, including basic Chinese conditions, traditional Chinese culture, contemporary development of China, and international relations of China, helps students obtain the insight into China's history and culture, view China's social development, feel the core values in the Chinese culture, and understand the characteristics of China's social and cultural development at the same time of improving their Chinese proficiency. In addition, this course also guides students to correctly understand the values of the Chinese culture and in time, recognize and evaluate China's national situation in an objective and friendly manner. The course aims to enhance students' identification with the Chinese culture by providing varied cultural experiences and practices to present a true and vivid image of China from multiple perspectives and in multiple dimensions.

2. Chinese I (Zhu Ming)

"Chinese Ⅰ" is a beginner-level comprehensive Chinese course designed for learners with no prior knowledge of the language. The course uses the textbooks "HSK Standard Course 1" and "HSK Standard Course 2." The course content is based on HSK (Chinese Proficiency Test) levels 1 and 2 and includes instruction and practice in phonetics, vocabulary, grammar, and Chinese characters. The first two lessons focus on phonetics, providing a systematic introduction to Chinese phonetic knowledge, including consonants, vowels, tones, and syllable structures. Starting from the third lesson, each lesson centers around a specific theme and various scenarios for dialogues. Each lesson covers approximately 10 to 20 new words and 3 to 4 grammar points. The topics include personal information, daily life, shopping, dining, hobbies,

and more. The course structure includes warm-up activities, lesson texts, explanations of language points, exercises, pronunciation practice, character recognition, and practical applications. Through this course, learners will gain a preliminary understanding of Chinese phonetics and grammar characteristics, develop basic listening, speaking, reading, and writing skills, and be able to engage in short conversations on familiar topics and carry out simple social interactions.

3. Chinese II (Zhu Ming)

"Chinese Ⅱ" is an introductory Chinese language course. The course uses the textbook "HSK Standard Course 3." "Chinese Ⅱ" is suitable for learners who have completed 64 credit hours and have a grasp of approximately 450 Chinese vocabulary words. The course consists of 20 lessons, with each lesson divided into four segments. Each lesson includes 12-25 new words and 2-3 language points. Each lesson is structured with warm-up, text, exercises, characters, application, and idiomatic expressions, with a cultural section introduced every 5 lessons. Topics cover experiences in travel, course situations, cultural activities, holiday customs, professions, and more. Through this course, learners will acquire general listening, speaking, reading, and writing abilities, enabling them to engage in brief communication on basic daily life, study, and work topics and complete routine social interactions. The course also includes simulated exercises in preparation for the HSK Level 3 exam to help learners become familiar with HSK question types and simultaneously enhance their Chinese language skills and exam performance.

(II) Compulsory liberal courses (2 credits/course, 10 credits in total)

1. Introduction to Cognitive Neuroscience (add teachers' names)

Introduction to Cognitive Neuroscience introduces the biological basis of higher cognitive functions of the brain, including perception, attention, memory, language, emotion, executive function, and consciousness. The course will explore the function of the nervous system and the basic knowledge of neuroanatomy, brain structure and functional imaging techniques, research methods used in cognitive neuroscience, and

the latest theories and debates in the field.

2. Research Methods in Psycho-Behavioral Sciences (Chen Antao, Chen Jing, Han Chao)

Systematic study of experimental research methods in psycho-behavioral sciences based on specific research cases. The main contents include experimental design methods, experimental programming based on MatLab Psychtoolbox, acquisition of behavioral, eye movement and EEG data, Matlab-based experimental data analysis and graphing, as well as methods and techniques of paper writing.

3. Frontiers in Cognitive Neuroscience (Chen Antao, Chen Jing, Han Chao)

The course will focus on cutting-edge research topics in cognitive neuroscience, including aspects ranging from memory, attention, perception, and emotion. The selection of presentation topics will be based on the latest research directions carried out by the Research Center for Sports and Brain Sciences of Shanghai University of Sport and the most cutting-edge debates in the international scientific community.

4. Advanced Statistics (Liu Ying, Luan Mengkai)

This course combines theory and practice to systematically introduce most common statistical techniques used in modern psychology and related disciplines, and to enable students to understand and master the application of statistics in practice by introducing the use of SPSS and R language in relevant cases. Students can master the basic theories and methods of statistical design, data collection, organization and analysis, and develop statistical thinking skills and application skills through this course.

5. Exercise and Brain Science (Zhang Li, Zhou Libing, Qu Yibo)

This course explores the effects of exercise on the molecular level, the cellular level, and the intercellular within the nervous system from the perspective of brain science, and the role of these processes in integrating within the central control system. The

course content includes the relationship between exercise and emotion, cognitive development, motor skill learning, competitive sports performance and other psychological phenomena and the brain neural mechanisms behind them, revealing the role of exercise on brain function, brain structure, brain networks and other aspects of influence.

(III) Non-degree elective courses (2 credits/course. Select any 2 courses, 4 credits in total)

1. Tai Chi (Zhu Dong)

Tai Chi is a traditional Chinese exercise for both body and mind health. This course combines the traditional eastern wisdom of health care and teaches easy-to-learn Tai Chi routines and traditional Chinese fitness methods to allow students to master the characteristics of Tai Chi movements and basic movement laws and achieve the ability to perform Tai Chi routines and fitness methods independently and skillfully.

2. Basic Skills of Table Tennis (Feng Zhe)

Table tennis is not only the "national sport" of China, but also a popular sport across the world. Playing table tennis can improve body agility and coordination, enhance cardiovascular function, achieve physical fitness and brain health, which is suitable for both young and old. This course is an elective course provided to international students which consists of 32 credit hours. The aim is to allow students to master the basic theory on table tennis, the basic skills, and the rules of table tennis competitions. The course is based on practical exercises and is taught in English.

3. Fitness Qigong – The Eight Brocade (Zhang Yunya)

By combining theory and practice, help students master the technical movements, characteristics, and practice essentials of Fitness Qigong – The Eight Brocade;

understand the historical origin of Fitness Qigong – The Eight Brocade and its cultural connotation and health value, develop students' ability of self-practice and self-care, and improve students' knowledge and understanding of traditional Chinese exercises for health care.

4. Traditional Chinese Cultural Practices (Jia Ting)

Based on a brief introduction to traditional Chinese thoughts, languages, and writings, the course will guide students to discover the characteristics of calligraphy, paper cutting, Kunqu (Chinese theater and opera, and tea ceremony in different types of cultural practice classes. The aim is for students to appreciate the unique aesthetics of folk paper-cutting, the rich cultural connotation and elegant artistic taste of Kunqu, and to experience the subtleties of tea ceremony techniques. Innovating the traditional one-dimensional class mode, this course allows students to experience the charm of traditional Chinese culture "in zero distance" in forms of experience, production, and communication.

5. Visual Perception (Han Chao)

Vision is the most important human sensory system, and vision-related physiology, brain science, and cognitive psychology have been hot research topics in their respective fields in recent decades. This course starts with the physiological structure of the visual system and systematically introduces the formation process and characteristics of visual perception in combination with the neural response characteristics of each part of the visual pathway. This course specifically covers color perception, shape perception, spatial perception, motion perception, binocular vision, multimodal perception, and motion vision, which is a special feature of our school. Through this course, students will gain a systematic understanding of the neural mechanisms of the visual system, and through vision, a relatively mature research paradigm, they will learn about current research ideas and technical tools in cognitive neuroscience and cognitive psychology, and be inspired to think about more ambitious scientific issues such as the evolutionary significance of perception and the formation

mechanisms of consciousness.

6. Brain Imaging Research Methods (Zhuang Jie)

A systematic introduction to brain imaging experimental design principles and methods, to develop students' ability to design optimal brain imaging experiments and experimental operation skills based on actual research problems. Through a combination of theory and practice, students are introduced to brain imaging experimental data analysis methods and commonly used software, guided to master the analysis principles and operational skills in each step of the actual hands-on process, and improve their analytical ability to solve common problems independently.

7. Video Games and Cognition (Li Xiangqian)

The relationship between video games (especially adversarial action video games) and players' cognitive abilities has received a lot of attention from researchers in the last 20 years. In this course, we will explore how participation in video games affects our cognitive control, decision-making style, and mental health. Specifically, we will explore the theoretical framework, research methodology, and conceptual crisis behind these findings, and we will also explore influences from game genre and game level. Finally, we will also discuss the future direction of video game research, and we want our students to have a good command of the field of e-sports psychology.

(IV) Compulsory practice (2 credits)

Academic exchange: Students shall make an oral report or a poster presentation at an international academic conference in or outside China.

IV. Tutor Team

Chen Antao (program leader), professor and doctoral tutor, School of Psychology, Shanghai University of Sport, an inductee of the National Hundred Million Talents

Project, an author of one hundred excellent doctoral dissertations, and an outstanding talent of the Ministry of Education in the new century. He is an Associate Editor of *Journal of Psychological Science* and specializes in research combining experimental psychology and cognitive neuroscience, with a specific focus on the neural mechanisms of cognitive control (including motor control and motor skill learning), and has led seven NSFC projects in this area so far. He has published more than 200 academic papers in high-impact academic journals (e.g. *American Journal of Psychiatry, Behavioral and Brain Sciences, Psychological Science*), top journals in psychology and neuroscience (e.g. *Journal of Experimental Psychology General, Journal of Neuroscience, NeuroImage, Cerebral Cortex*). His research achievements have won several provincial and ministerial research awards, including the second prize (first finisher) of Chongqing Natural Science Award.

Chen Jing, professor and doctoral tutor at the School of Psychology, Shanghai University of Sport. He graduated from the Department of Psychology, Peking University in 2012 for his B.S. degree, from the Department of Psychology, University of Hong Kong in 2014 for his M.S. degree, and from the Department of General Psychology, Giessen University, Germany for his Ph.D. in 2017. He mainly adopts psychophysical methods, eye-movement techniques and EEG SSVEP techniques to study the information processing of early visual and color perception. He has been in charge of many research projects including the NSFC, the Shanghai Yangfan Program and the Shanghai Overseas High-Level Talents Program, and published more than 10 papers in professional SCI journals in the fields of *Journal of Neurophysiology, Journal of Vision,* etc.

Zhuang Jie, professor and doctoral tutor in the School of Psychology at Shanghai University of Sport. He received his PhD from the Department of Psychology, University of Cambridge. He was systematically trained as an experimental psycholinguist and cognitive neuroscientist. He has a long-standing focus on language comprehension and cognitive control, taking a combined approach of behavioral, EEG, fMRI and TMS for his research. Before returning to China in 2018, he worked as a Research Associate and Senior Research Associate at Cambridge University and

Duke University.

Liu Ying, associate professor and master's tutor at Shanghai University of Sport. She received her Bachelor's degree in Biological Sciences from East China Normal University, her Master's degree in Learning Sciences from Southeast University (thesis advisor Renlai Zhou), and her Doctoral degree in Brain, Cognition and Behavior from University of Paris VI. She has been teaching at Shanghai University of Sport since 2013. In education, she is responsible for two specialized courses of *Education and Psychological Statistics* and *Sport Psychology* for undergraduate students. Her research focuses on brain mechanisms of perception, attention and consciousness, and cognitive processing of motor control is one of her current research directions. She conducts her research mainly with imaging techniques such as electroencephalography (EEG) and functional near-infrared spectroscopic imaging (fNIRS). She has published articles in *Frontiers in Neuroscience, Frontiers in Human Neuroscience and Neuroscience* as first author and corresponding author, and has undertaken and participated in several national research projects.

Han Chao, associate professor and master's tutor at the School of Psychology at Shanghai University of Sport. He received his Ph.D. in Neuroscience from the Chinese Academy of Sciences and then pursued Postdoctoral research at The Ohio State University. He joined Shanghai University of Sport in 2020 and his research direction is visual perception. To be specific, there are three main directions: 1. Study. Binocular vision. Psychophysical and electroencephalogram (EEG) experiments are conducted to investigate the neural mechanisms of binocular depth perception resulting from the two eyes working together and how to clinically improve binocular vision in patients (i.e., amblyopes). 2. Spatial perception. The main points of interest are how the human visual system reconstructs 3D scenes from 2D images or movies, and how humans navigate in a rarely used 3D space: height. 3. Movement vision. The main goal is to figure out how vision participates in sports and how vision is affected by sports. As we all know, humans have two different visual pathways (ventral or "what" path and dorsal or "where/how" path), which will break the barriers of traditional vision laboratories and study visually guided movements in real motion

scenes.

Li Xiangqian, lecturer and master's tutor in the School of Psychology at Shanghai University of Sport. He studied psychology in the United States (Washington State University) and Scotland (University of Glasgow). After graduation, he returned to China and worked as a Postdoctoral Researcher at Fudan University until the end of 2020 when he joined Shanghai University of Sport. His research focuses on understanding the relationship between attention, memory, and cognitive control, especially during task switching, and he also studies interference control and action inhibition. In the area of individual differences, he has also explored the cognitive control advantages of action video game players in his research. He also has some research interest in individual facial aesthetic preferences.

Luan Mengkai, lecturer and master's supervisor at the School of Psychology, Shanghai University of Sport. He received the B.S. degree in Statistics from Beijing Normal University in 2014, the M.S. degree in Cognitive Neuroscience from Beijing Normal University in 2017 and was awarded the Outstanding Graduate of Beijing, and the Ph.D. degree in Psychology from Technical University of Munich, Germany in 2021, respectively. His research takes psychophysical, brain imaging techniques and machine learning approaches to explore the cognitive neural mechanisms of motor skill learning and performance. He has published 7 articles in important international SCI/SSCI journals in the field, and his research results have been reported in several top international conferences in the direction of sport psychology.

Zhang Li, researcher at the Research Center for Sports and Brain Sciences, Shanghai University of Sport, an associate researcher at the Guangdong, Hong Kong and Macau Institute of Central Nerve Regeneration of Jinan University, an independent group leader (PI), and master's tutor. He graduated from the University of Hong Kong with a Bachelor of Science degree in Biological Sciences (First Class Honors Distinguished Graduate) in 2009 and a PhD degree from the School of Biological Sciences of the University of Hong Kong in 2014. He is currently presiding over or undertaking a number of projects under the National Key Research and Development Program and the NSFC. He has published 18 SCI papers in the past 5 years, and his representative

results have been published in prestigious academic journals such as *Science Advances, iScience, Neuropsychopharmacology, Translational Psychiatry*, etc.

V. Graduation and Degree Awarding

1. Obtain the HSK3 certificate of the Chinese Proficiency Test;
2. Applicants have achieved representative achievements and published one paper as the first author in JCR journal partitioned in Q3 or above;
3. Obtain all required credits;
4. Pass the dissertation defense.