# Shu-Hao (Howard) Chang

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## **EDUCATION**

University of Florida (UF), Gainesville, FL

Ph.D. in Sport Management (SPM), College of Health and Human Performance (HHP)

August 2024 - Present

Committee: Dr. Yong Jae Ko (Chair), Dr. Jasamine Hill, Dr. Chris Janiszewski, Dr. Jee Won Cheong, Dr. Yao-Chin Wang

Thesis: Sport fans' emotional journey in major league baseball: Natural language processing approach

University of Taipei (UT), Taipei, Taiwan

B.S. in Recreation and Sports Management (RSM), College of Kinesiology [Summa Cum Laude]

January 2021

May 2024

Thesis: Consumer preferences for sportswear among college students: Conjoint analysis approach

# **ACADEMIC APPOINTMENTS**

M.S. in Sport Management

Graduate Assistant, Department of Sport Management, University of Florida

2024 - Present

## **AWARDS**

Perry & Noel McGriff Endowed Scholarship, University of Florida	2024 - 2025
Grinter Fellowship Award, University of Florida	2024 - 2025
Outstanding Graduate Student Study Abroad Award - Sport Management, Ministry of Education, Taiwan	2024
Outstanding International Student Achievement Award, University of Florida	2023, 2024
College of HHP Student Poster Competition - Runner-up of the Sport Management Division, University of Florida	2024
National Collegiate Sports Analytics Championship - 4 <sup>th</sup> Place of the Graduate Division Virtual, Baylor University	2023
Excellence Graduate Award, Taipei City Government, Taiwan	2021
University Presidential Scholarship, University of Taipei	2018 - 2021

## **RESEARCH INTERESTS**

#### **Sport Consumer Behavior**

#### Generative AI

My research focuses on sport business analytics and technology-driven innovation within the sport industry. I am particularly interested in understanding (1) sport consumer behavior and (2) the integration of generative AI into sport. My first line of research centers on fan behavior and psychology, with a specific focus on social media engagement, branding, and virtual reality spectatorship. I employ a range of quantitative and computational methods (e.g., surveys, experiments, machine learning, and natural language processing) to examine fan responses in various sport contexts. My second line of research explores how generative AI can be utilized to enhance sport management and education. This includes investigating the perceptions, opportunities, and challenges associated with AI adoption in the sport industry. The overarching goal is to contribute to and advance the literature in sport management.

## **PUBLICATIONS**

## **Refereed Journal Articles**

1. <u>Chen, S. Y.</u>, Kuo, H. Y. & **Chang, S. H.** (2024). Perceptions of ChatGPT in healthcare: Usefulness, trust, and risk. *Frontiers in Public Health*, *12*, 1457131. [SSCI & SCIE, IF: 3.0] https://doi.org/10.3389/fpubh.2024.1457131

#### **Manuscripts Under Review at Refereed Journals**

- 1. **Chang, S. H.**, Chen, S. Y., & Chang, C. H. (In 2<sup>nd</sup> review). Exploring opportunities and challenges toward ChatGPT for inclusion in sport education. *Journal of Hospitality, Leisure, Sport & Tourism Education*. [SSCI, IF: 4.8]
- Chang, C. H., & Chang, S. H. (In 2<sup>nd</sup> review). An amazing teammate or an awful teammate? The mediating effect of cooperative learning on peer leadership and social loafing. *Journal of Taiwan Society for Sport Management*.
- 3. **Chang, S. H.**, & <u>Ko, Y. J.</u> (In review). Exploring fans' social media engagement in national basketball association and major league baseball: A consumer culture theory perspective. *Journal of Sport Management*. [SSCI & SCIE, IF: 3.5]
- 4. **Chang, S. H.**, & <u>Ko, Y. J.</u> (In review). Sport fans' emotional journey in major league baseball. *Sport Management Review*. [SSCI, IF: 3.7]
- 5. Chang, S. H., Kuo, H. Y., & Chen, S. Y. (In review). Exploring university students' use of ChatGPT: Extending the technology acceptance model with trust, and risk career impact. *Educational Technology Research and Development*. [SSCI, IF: 3.3]
- 6. Chang, S. H., Ko, Y. J., & Davis, S. (In review). Sport fan' emotional journey on social media in the national basketball association: An application and extension of diminishing returns theory. *Journal of Sport Management*. [SSCI & SCIE, IF: 3.5]

## **GRANTS**

## Funded Externally: Principal Investigator (PI) / Co-PI / Assistant Researcher (AR)

- 1. **Chang, S. H.** (PI), & Ko, Y. J. (Co-PI) (2025-2026). Exploring the potential of generative AI in sport: Implications for sport management and education. Ministry of Education, Taipei, Taiwan. (\$16,000).
- 2. **Chang, S. H.** (PI), & Ko, Y. J. (Co-PI) (2024-2025). Sport fans' preference and emotional journey toward game outcomes in the World Baseball Classic: Application of natural language processing to the cases of team Taiwan and team USA. Ministry of Education, Taipei, Taiwan. (\$16,000).
- Chen, S. Y. (PI), Chang, S. H. (AR), & Kuo, H. Y. (AR) (2024-2025). ChatGPT behaviors and perception toward its applications. National Science and Technology Council, Taipei, Taiwan. NT\$800,000 (\$26,666).
- Chang, C. H. (PI), Kwan, W. Y. (Co-PI), Hsueh, M. C. (Co-PI), Chang, S. H. (AR), & Yang, C. E. (AR) (2018-2020). Evaluation
  of grassroots athlete training facilities and baseball teams from elementary to university levels. Sports Administration, Taipei,
  Taiwan. NT\$6,870,000 (\$229,000).

#### Funded Internally: Principal Investigator (PI) / Co-PI

- 1. **Chang, S. H.** (PI), & Ko, Y. J. (Co-PI) (2025). Exploring AI applications in health and human performance. UF AI<sup>2</sup> Center Research Grant, Gainesville, FL. (\$2,000).
- Chang, S. H. (PI), & Ko, Y. J. (Co-PI) (2024). Generative AI for academic learning and competency development: Perspectives from sport management students. UF SPM Doctoral Research Grant, Gainesville, FL. (\$500).
- 3. Chang, S. H. (PI), & Ko, Y. J. (Co-PI) (2024). Sport fan engagement on social media during playoffs in major league baseball and the national basketball association (EASM). UF SPM Graduate Student Travel Grant, Gainesville, FL. (\$1,000).
- Chang, S. H. (PI), & Ko, Y. J. (Co-PI) (2024). Sport fans' emotional responses toward game outcomes in the 2023 MLB Postseason (NASSM). UF SPM Graduate Student Travel Grant, Gainesville, FL. (\$1,000).

### **Submitted**

- 1. **Chang, S. H.** (PI), & Ko, Y. J. (Co-PI) (In review). Exploring sport coaches' perception and adoption of generative AI: The roles of perceived value. UF Institute of Coaching Excellence Research Grant, Gainesville, FL. (\$1,500).
- 2. Chen, S. Y. (PI), & Chang, S. H. (AR) (In review). The role of ChatGPT in academic learning, and competency development. National Science and Technology Council, Taipei, Taiwan. NT\$900,000 (\$30,000).

# Unfunded

- 1. **Chang, S. H.** (PI) (2025). Enhancing sport marketing analytics through AI integration. UF AI<sup>2</sup> Center and UFIT Center for Instructional Technology & Training Grant, Gainesville, FL. (\$3,000).
- 2. **Chang, S. H.** (PI), & Ko, Y. J. (Co-PI) (2025). The impact of perceived generative AI value on scholars' psychological and behavioral responses: A case of sport management field. NASSM Doctoral Research Grant, Vermillion, SD. (\$2,000).

- 3. Ko, Y. J. (PI), Kang, P. (Co-PI), Chun, Y. (Co-PI), Yun, L. (Co-PI), Kim, J. (Co-PI), Chang, S. H. (Co-PI), & Davis, S. (Co-PI) (2024). Loneliness and socialization among student-athletes: Integrative framework and empirical evidence. NCAA Innovations in Research and Practice Grant, Indianapolis, IN, U.S. (\$34,500).
- Chang, S. H. (PI), & Huang, Z. (Co-PI) (2024) Consumer analysis and marketing strategy: Machine learning approach to Gainesville Health and Fitness (GHF) member connections. GHF & UF College of HHP AI Grant, Gainesville, FL. (\$10,000).
- 5. Ko, Y. J. (PI), Kang, P. (Co-PI), Yun, L. (Co-PI), Asada, A. (Co-PI), Davis, S. (Co-PI), & Chang, S. H. (Co-PI) (2023). Mascots and consumer socialization: An integrative model. Sport Marketing Association Research Grant, Alliance, OH. (\$1,810).

#### PRESENTATIONS (\*PRESENTER)

#### **Refereed International Conference**

- \*Chang, S. H., & Ko, Y. J. (In review). Exploring sport marketers' psychological and behavioral responses toward generative AI. Sport Marketing Association Conference (SMA), Glendale, AZ.
- 2. \*Chang, S. H., & Ko, Y. J. (In review). Branding of female athletes: A case of LPGA players. Sport Marketing Association Conference (SMA), Glendale, AZ.
- 3. Davis, S., & \*Chang, S. H. (In review). Exploring event impacts and fan engagement in the world baseball classic: A social exchange theory perspective. European Sport Management Conference (EASM), Budapest, Hungary.
- 4. \*Chang, S. H., Hwang, D., Lee, T., & Ko, Y. J. (In review). Beyond the sidelines: Fans' social media discussions on the Asia's cheerleaders in professional baseball. European Sport Management Conference (EASM), Budapest, Hungary.
- \*Lee, T., Chang, S. H., Park, S., Connaughton, D., & Ko, Y. J. (2025, May, oral presentation). This is my sport! Impact of automated ball-strike (ABS) technology and its dehumanization on fan responses. North American Society for Sport Management Conference (NASSM), San Diego, CA.
- 6. \*Chang, S. H., Ko, Y. J., & Davis, S. (2024, November, oral presentation). Consumers' responses in MLB on social media: Topic modeling and sentiment analysis approach. Sport Marketing Association Conference (SMA), St. Louis, MO.
- \*Chang, S. H., & Ko, Y. J. (2024, November, oral presentation). Exploring fans' emotional journey on social media during the 2023 NBA playoffs: An application and extension of diminishing returns theory. Sport Marketing Association Conference (SMA), St. Louis, MO.
- \*Chang, S. H., & Ko, Y. J. (2024, September, oral presentation). Sport fan engagement on social media during playoffs in major league baseball and the national basketball association: Natural language processing approach. European Sport Management Conference (EASM), Paris, France.
- 9. \*Chang, S. H., Chen, S. Y. & Chang, C. H. (2024, September, oral presentation). Generative AI and inclusivity in sport education: A survey study. European Sport Management Conference (EASM), Paris, France.
- \*Chang, S. H., Ko, Y. J., & Davis, S. (2024, June, oral presentation). Sport fans' emotional responses toward game outcomes in the 2023 MLB Postseason: Natural language processing approach. North American Society for Sport Management Conference (NASSM), Minneapolis, MN.
- 11. \*Chang, S. H., & Ko, Y. J. (2023, October, oral presentation). Sports coverage in news media during Covid-19: Topic modeling and sentiment analysis approach. Sport Marketing Association Conference (SMA), St. Petersburg, FL.
- 12. \*Ko, Y. J., Kang, P., Davis, S., Yun, L., & Chang, S. H. (2023, September, oral presentation). Exploring consumer response toward different types of mascots in mega-sports events: Social media big data and machine learning approach. European Sport Management Conference (EASM), Belfast, North Ireland.
- 13. \*Chang, S. H., \*Hu, Y. H., Chao, J. B., Huang, Y. C., Huang, W. H., & Chiu, C. R. (2020, December, oral presentation). Consumer preferences for sportswear among college students in Taiwan: Conjoint analysis approach. Sports Education, Sports Training, and Sports Industry Management Conference, Taipei, Taiwan.

## **Regional Conference / Competition**

- \*Chang, S. H., & Ko, Y. J. (2025, April, poster presentation). The impact of generative AI attributes on scholars' psychological and behavioral response. UF Graduate Student Research Day, Gainesville, FL.
- 2. \*Chang, S. H., Hwang, D., Lee, T., & Ko, Y. J. (2025, March, poster presentation). "From cheers to culture": social media sentiments in professional sports. UF College of HHP D.K. Stanley Lecture Research Symposium, Gainesville, FL.

- 3. \*Chang, S. H., Hwang, D., Lee, T., & Ko, Y. J. (2024, October, poster presentation). Exploring sport fans' social media engagement with cheerleaders in S. Korea and Taiwan. UF College of HHP AI Research Day, Gainesville, FL.
- 4. \*Hwang, D., Chang, S. H., Yun, L., Kim, J., Yang, Y., & Ko, Y. J. (2024, October, poster presentation). Exploring global soccer transfer market trends. UF College of HHP AI Research Day, Gainesville, FL.
- \*Chang, S. H., & Ko, Y. J. (2024, May, oral presentation). Exploring fans' emotional journey on social media in the NBA: An
  application and extension of diminishing returns theory. University of Florida, Sungkyunkwan University and Waseda University
  Sport Consumer Behavior Symposium, Virtual.
- 6. \*Chang, S. H., & Ko, Y. J. (2024, April, poster presentation). Sport fans' emotional journey toward game outcomes in the NBA: Social media big data and machine learning approach. UF Graduate Student Research Day, Gainesville, FL.
- \*Chang, S. H., & \*Huang, Z. (2024, March, *Team Final Four*) Consumer geographic segmentation analysis and sport
  marketing strategy: Machine learning approach to Gainesville Health and Fitness (GHF) member connections. UF College of
  HHP & Gainesville Health and Fitness AI Competition, Gainesville, FL.
- 8. \*Chang, S. H., Ko, Y. J., & Davis, S. (2024, March, poster presentation, *Runner-up*). Sport fans' emotional responses toward game outcomes in the 2023 MLB postseason: Natural language processing approach. UF College of HHP D.K. Stanley Lecture Research Symposium, Gainesville, FL.
- 9. \*Chang, S. H., & Ko, Y. J. (2024, February, oral presentation). NBA Fans' emotional responses toward game outcomes: Machine learning approach. University of Florida and Loughborough University Sport Marketing Symposium, Virtual.
- 10. \*Chang, S. H., & Ko, Y. J. (2024, February). Green venues energy consumption, CO<sub>2</sub> emissions, and sustainability strategies in sports facilities: Deep learning approach. National Collegiate Sports Analytics Championship Graduate Division, Dallas, TX.
- 11. \*Chang, S. H., & Ko, Y. J. (2023, November, *National 4<sup>th</sup> Place Award*). Elevating professional sports ticket sales toward customer relationship management data: Machine learning approach. National Collegiate Sports Analytics Championship Graduate Division, Virtual.
- 12. \*Chang, S. H. (2023, October). Synergy of wellness: HHP gators' journey through health and technology. UF College of HHP AI Competition, Gainesville, FL.
- 13. \*Chang, S. H., & Ko, Y. J. (2023, October, poster presentation). Sport fans' emotional responses toward game outcomes in the 2022-2023 NBA Playoffs: Natural language processing approach. UF College of HHP AI Research Day, Gainesville, FL.

# **Invited Lectures**

- 1. Time series big data analysis (2024, November, graduate). Presented in HLP6515 Evaluation Procedures in Health and Human Performance at University of Florida Course Instructor: Dongkyu Hwang.
- 2. AI application in sport studies (2023, March, graduate). Presented in SPM6036 Research Seminar in Sport Management at University of Florida Course Instructor: Yong Jae Ko.

## RESEARCH EXPERIENCE

## Graduate Research Assistant, UF Sport Marketing Research Lab

2024 - Present

Conducting research on sport business analytics, sport marketing, consumer behavior, and generative AI.

Publishing research in refereed journals and presenting at international conferences.

Securing and managing grant-funded research projects, including proposal writing, budgeting, and collaboration.

## Research Assistant, University of Taipei

2018 - 2020

Conducted field visits to assess the implementation status of youth baseball training programs.

Assisted in compiling findings and preparing reports submitted to the Sports Administration for program improvement.

## Research Assistant, Sports Administration of Taiwan

2019

Kwan, W. Y., Hsueh, M. C., & Chang, C. H. (2019). Sports facilities: High quality facilities, friendly atmosphere.

National Sports Special Issue (pp. 142-165). Taipei, Taiwan: Sports Administration.

## **TEACHING EXPERIENCE**

Sport Marketing Association (SMA)

Shu-Hao Chang CV

2023 - Present