UF|Sport Management
UNIVERSITY of FLORIDA

SPM 7900: Readings in Sport Management
Quantitative Analysis in Sport Consumer Research

Instructor contact information
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Course description:
This course is designed to equip students with the necessary tools and techniques to analyze sport consumer behavior data using multivariate statistical methods. The course will cover advanced topics such as multiple regression analysis, factor analysis, and nested structural equation modeling. Additionally, big data-related analytics will be explored, including decision tree modeling, sentiment analyses, and propensity score modeling. The course assignments will provide students with actual data related to sport consumer behavior to analyze using the techniques covered in the course. Through these assignments, students will gain practical experience in applying these analytical techniques to real-world data. Students will learn how to use R and R programming to conduct these analyses, interpret the results, and communicate their findings effectively to a broader audience.

Course objectives
- Develop Competency in Multivariate Statistical Methods
- Explore and Apply Big Data Analytics Techniques
- Gain Practical Experience with Real-World Data
- Proficiency in R Programming for Data Analysis
- Interpret and Communicate Analytical Findings Effectively
- Integrate Theoretical Knowledge with Practical Applications
- Enhance Problem-Solving and Critical Thinking Skills

Evaluation

	% breakdown
Weekly reflections on readings	30
Monthly discussions with faculty advisor on weekly reflections	10
Research proposal/Conceptual paper	50
Research proposal/Conceptual paper presentation	10
Total	100

Readings

SEE WEEKLY SCHEDULE

Weekly reflections

The student will to submit to the faculty advisor a 2-page reflection of the key findings in identified the paper and the new knowledge contributed to the literature through these readings. The student should also identify a potential future research idea. Paper should be double spaced using 12 size font, and follow APA formatting guidelines.

Research proposal/Conceptual paper

The student will develop a 15-page paper (minimum) using APA formatting, selecting one of the two following options:

1. **Research Proposal**

Introduction: lay out the problem, briefly mention what is lacking in the literature and conclude with the study's purpose and research question(s).
Literature review: discuss the relevant theoretical frameworks that support the research question of the study, the relationships among the variables of the study the student proposes to interrelate and conclude with a research framework (or model) with research hypotheses or propositions. . Use subheadings wherever possible for reader clarity.
Method, Analysis: Lay out the research design that can answer the research question and test research hypotheses. Provide measurement details, study population/sample, expected analysis details
Potential Contribution: Describe how this study might contribute to the literature and the specific sport industry segment, regardless of the results.

2. **Conceptual Paper**

Introduction: lay out the problem, briefly mention what is lacking in the literature and conclude with the paper's purpose. Highlights the tensions, inconsistencies, and contradictions surrounding an issue.
Literature review: Discuss the relevant literature in which the theoretical and/or conceptual frameworks are situated.
*Framework/Propositions***:** Highlights the relevant literature that forms your argument, creating propositions that extends a theoretical space and provides bridges across constructs.
Discussion and Implications: Summarizes the contribution of your propositions, and provides the theoretical, practical, and research implications for them.

Research Proposal/Conceptual Paper presentation

Develop a power point presentation that addresses the key sections of your paper. The presentation should not last more than 20 min in duration.

Grading Scale

(There will be no rounding of the grades, no exceptions). The final grade will be assigned according to the following grading scale:

A	= 100-93	C(S)	= 76.99-73
A-	= 92.99-90	C-(U)	= 72.99-70
B+	= 89.99-87	D+	= 69.99-67
B	= 86.99-83	D	= 66.99-63
B-	= 82.99-80	D-	= 62.99-60
C+	= 79.99-77	E	= 59.99-0

Course Outline

Module 1: Single Variable Linear Regression

- *Topic 1 – Week 1: Understanding the Landscape of Sport Business Data and Simple Linear Regression in Sport Consumer Behavior Research*
- *Topic 2 – Week 2: Reliability and Accuracy of Regression Analyses for Sport Consumer Insights*
  ➔ Exploring the 'car' Package in R for Analytical Techniques: Link

Assignments: Exercise 1

Key readings:

Chang, Y. (2018). When infamy becomes fame: The positive side of negative athlete publicity. *Journal of Sport Management, 32*, 401-411.

Chang, Y., & Katz, M. (2023, in press). When feeling is for pursuing: Exploring the moderating role of spectatorship locus of control on fans' emotion-directed pursuit of consumption goals*. Sport Management Review.*

Chang, Y., Wann, D. L., & Inoue, Y. (2018). The effects of implicit team identification on revisit and word-of-mouth intentions: A moderated mediation of emotions and flow. *Journal of Sport Management, 32*, 334-347.

Module 2: Predictive Insights: Multiple Regression

- *Topic 1 – Week 3: Least Squares Estimation in Sport Consumer Data*
- *Topic 2 – Week 4: Multiple Regression Techniques in Spot Business Contexts*
  ➔ Utilizing the 'STAT' Package in R for Regression Analysis: Link

Assignments: Exercise 2

Key readings:

Chang, Y., & Inoue, Y. (2021). Spectator emotions in predicting psychological vigor: Emotional meta experience and affect valuation perspectives. *Sport Management Review, 24*, 594-619.

Chang, Y., & Kwak, D. H. (2023). When team sponsorship of cause-related messages leads to unfavorable fan reactions: The interplay among competency, cause orientation, and message source. *European Sport Management Quarterly, 23*, 1024-1045.

Chang, Y., Warren, C., & Lee, T. (2023, in press). Virtual reality technology induced flow in the spectator sports context: Empirical examinations of VR flow, its unique antecedents and consequences. *Sport Marketing Quarterly.*

Module 3: Linear Mixed Models

- *Topic 1 – Week 5: Fixed Effects and Mixed Effects in Sport Business Analytics*
- *Topic 2 – Week 6: Hierarchical Data Structures in Sport Business and Marketing*
  ➔ Navigating the 'lavaan' Package in R for Structural and Mediation Analysis: Link

Assignments: Exercise 3

Key readings:

Chang, Y. (2018). Exploring the patterns of dual attitude changes in the context of athlete endorsement: The interplay of fit, evaluative conditioning, and introspection focus. *Journal of Sport Management, 32*, 413-425.

Chang, Y., Schull, V., & Kihl, L. A. (2021). Remedying stereotype threat effects in spectator sports. *Journal of Sport Management, 35*, 172-184.

Chang, Y., & Wann, D. L. (2022). Effects of game outcomes and status instability on spectators' status consumption: The moderating role of implicit team identification. *Frontiers in Psychology, 13*, 819644.

Exam 1 – Week 7

Exercises 1, 2, and 3 recap – Week 8

Module 4: Uncovering Consumer Preferences: Conjoint Analysis

- *Topic 1 – Week 9: Applications of Conjoint Analysis in Sport Marketing*
- *Topic 2 – Week 10: Deciphering Subjective Values of Sport Consumers*
  ➔ Applying Conjoint Analysis using the 'conjoint' Package in R: Link

Assignments: Exercise 4

Key readings:

Chang, Y. (2021). Effects of game situation-dependent emotions on sport spectators' food craving. *Frontiers in Psychology, 12*, 724220.

Green, P. E., & Srinivasan, V. (1978). Conjoint analysis in consumer research: issues and outlook. *Journal of Consumer Research, 5*(2), 103-123.

Module 5: Analyzing Social Media Insights: Automated Text Analysis

- *Topic 1 – Week 11: Extracting Sport Consumer Sentiments on Social Media*
- *Topic 2 – Week 12: Understanding Emotions in Sport Consumer Discourse*
  ➔ Utilizing the 'rtweet' Package in R for Text Mining: Link

Assignments: Exercise 5

Key readings:

Chang, Y. (2019). Spectators' emotional responses in tweets during the Super Bowl 50 game. *Sport Management Review*, 22, 348-362.

Gong, H., Watanabe, N. M., Soebbing, B. P., Brown, M. T., & Nagel, M. S. (2021). Do consumer perceptions of tanking impact attendance at national basketball association games? a sentiment analysis approach. *Journal of Sport Management, 35*(3), 254-265.

Mao, L. L. (2020). Understanding retail quality of sporting goods stores: A text mining approach. *International Journal of Sports Marketing and Sponsorship*. Advance online publication.

Module 6: Decision Trees in Consumer Behavior Analysis

- *Topic 1 – Week 13: Mapping Consumer Decisions: CHAID Tree Models for Sport Consumers*
- *Topic 2 – Week 14: Decision Hierarchies in the Sport Consumer Landscape*
  ➔ Implementing Decision Trees with the 'rpart' Package in R: Link

Assignments: Exercise 6

Key readings:

Chang, Y., Warren, C., & Katz, M. (2023). Determinants of subscription renewal behavior in sport spectatorship services: A CHAID decision tree modeling approach. *Sport Marketing Quarterly, 32*, 124-136.

O'Reilly, N., Nadeau, J., & Kaplan, A. (2011). Do fans want their team to be competitive in the short-term (the next game) or the long-term (the full season), and does the answer affect management decisions? *European Sport Management Quarterly, 11*(1), 73-86.

Exercises Grading Rubric

Criteria	Pts	Description
Content Knowledge	20	Demonstrates a strong understanding of relevant concepts. Applies appropriate theories, concepts, and models accurately. Provides insightful explanations and interpretations of results.
Data Analysis	20	Proficiently uses statistical software for data analysis. Conducts appropriate statistical tests or analyses. Presents data clearly and logically (e.g., tables, charts, graphs).
Communication & Presentation	10	Clearly communicates the purpose and objectives of the analysis. Organizes the report logically with a clear structure. Uses proper grammar, spelling, and formatting.
Total Possible Points	50	

Grading Scale	Pts	Description
	45-50	Excellent: Exceptional understanding of content; Proficient data analysis skills; Outstanding communication and presentation.
	40-44	Very Good: Strong understanding of content; Competent data analysis skills; Effective communication and presentation.
	35-39	Good: Adequate understanding of content; Satisfactory data analysis skills; Acceptable communication and presentation.
	30-34	Fair: Limited understanding of content; Basic data analysis skills; Needs improvement in communication and presentation.
	Below 30	Poor: Inadequate understanding of content; Weak data analysis skills; Poor communication and presentation.

Rubrics used for weekly reflections and Research Proposal/Conceptual Paper

Criteria	Exemplary (90-100 points)	Good (89-80 points)	Acceptable (79-70 points)	Unacceptable (69-60 points)
Purpose	The writer's central purpose or argument is readily apparent to the reader.	The writing has a clear purpose or argument, but may sometimes digress from it.	The central purpose or argument is not consistently clear throughout the paper.	The purpose or argument is generally unclear.
Content	Balanced presentation of relevant and legitimate information that clearly supports a central purpose or argument and shows a thoughtful, in-depth analysis of a significant topic. Reader gains important insights.	Information provides reasonable support for a central purpose or argument and displays evidence of a basic analysis of a significant topic. Reader gains some insights.	Information supports a central purpose or argument at times. Analysis is basic or general. Reader gains minimal insights.	Central purpose or argument is not clearly identified. Analysis is vague or not evident. Reader is confused or may be misinformed.
Organization	The ideas are arranged logically to support the purpose or argument. They flow smoothly from one to another and are clearly linked to each other. The reader can follow the line of reasoning.	The ideas are arranged logically to support the central purpose or argument. They are usually clearly linked to each other. For the most part, the reader can follow the line of reasoning.	In general, the writing is arranged logically, although occasionally ideas fail to make sense together. The reader is fairly clear about what writer intends.	The writing is not logically organized. Frequently, ideas fail to make sense together. The reader cannot identify a line of reasoning and loses interest.
Writing Feel	The writing is compelling. It hooks the reader and sustains interest throughout.	The writing is generally engaging, but has some dry spots. In general, it is focused and keeps the reader's attention.	The writing is dull and unengaging. Though the paper has some interesting parts, the reader finds it difficult to maintain interest.	The writing has little personality. The reader quickly loses interest and stops reading.
Grammar, Spelling, Writing Mechanics (punctuation, italics, capitalization,etc.) and sentence structure and length	The writing is free or almost free of errors. Sentences are well-phrased and varied in length and structure. They flow smoothly from one to another. Paper is the number of pages specified in the assignment.	There are occasional errors, but they don't represent a major distraction or obscure meaning. Sentences are well-phrased and there is some variety in length and structure. The flow from sentence to sentence is generally smooth.	The writing has many errors, and the reader is distracted by them. Some sentences are awkwardly constructed so that the reader is occasionally distracted.	There are so many errors that meaning is obscured. The reader is confused and stops reading. Errors in sentence structure are frequent enough to be a major distraction to the reader.

Paper has more or fewer pages than specified in the assignment. |