

Research on Satisfaction, Identity and Viewing Motivation of Women's Super Basketball League live audience

TSUNG-LING HSIEH¹ & JIH-LIAN HA²

¹Department of Sports Information and Communication

Aletheia University

Taipei, TAIWAN

²Department of Innovation Design and Entrepreneurship Management

Far East University

Tainan, TAIWAN

Abstract: - The main purpose of this study is to understand the current situation of fans' viewing behaviour in the Women's Super Basketball League (WSBL), and to explore the satisfaction, identity and viewing motivation of WSBL audiences. The questionnaire is divided into four parts, namely personal information, satisfaction, sense of identity, and viewing motivation, with a total of 57 questions, all of which are scored on a Likert five-point scale. A total of 400 questionnaires were randomly distributed, 350 valid questionnaires were obtained, and the valid questionnaire rate was 87.5%.

SPSS analysis was used, including reliability and validity, descriptive statistics, factor analysis, frequency allocation, independent sample T test, and one-way analysis of variance to analyze different topics. The findings of the study are as follows:

1. Questionnaires were distributed randomly. After the sale, it was found that the majority of the on-site audience were women, mainly between the ages of 20 and 25. Most of them had university degrees, and most of them were students.
2. The live audience of WSBL believes that watching WSBL can enhance the leisure fun, and they consider themselves to be loyal fans of a certain team in the WSBL event, and they think that it is a correct decision to watch WSBL live.

Keywords: - WSBL, satisfaction, identity, viewing motivationpages

Received: July 25, 2021. Revised: August 14, 2022. Accepted: September 15, 2022. Published: October 6, 2022.

1 Introduction

In recent years, the Taiwanese women's basketball team has performed better than the men's basketball team in international competitions, and has gradually gained a stable audience. Among them, the participation behaviour and psychology of fans are also factors that should be considered in running a team. Therefore, this study hopes to provide some suggestions for leagues and teams to market WSBL in the future by exploring fans' viewing motivations, that is, their identification with WSBL teams and their satisfaction with WSBL games.

1.1 Motivation for viewing

The viewing motivation in this study refers to the factors that make spectators or fans come to watch the game, including eight aspects: sense of achievement, sports aesthetics, drama, and escape from pressure, sports knowledge, sports skills, athlete attractiveness, and interpersonal relationships.

1.2 A sense of identity

In this study, identity refers to the extent to which fans care and support the performance of the teams they support, including four dimensions: sports identity, team identity, coach identity, and player identity.

1.3 Satisfaction

Satisfaction in this study refers to the difference between the original expected situation after the fans watched the game, and the actual experience of the game process and the hardware and software facilities of the league venues, including the overall and peripheral aspects.

2. Literature Survey

This chapter focuses on discussing and compiling related literature and data, which are as follows: Section 1, analysis of the current situation of the Women's Super Basketball League; Section 2, Theories related to satisfaction; Section 3, Theories related to identity; Section 4, the related theories of

viewing motivation; the fifth section discusses the correlation between various aspects.

2.1 Analysis of the Current Situation of the Women's Super Basketball League

Zhang Jiahao (2004), in his study on audience participation motivation and satisfaction in the Super Basketball League, focused on the discussion of viewing motivation, satisfaction and their correlations. Customer satisfaction is overall cumulative, that is, customers make a comprehensive measure of all their purchasing and consumption experiences. Anderson, Fornell (1994), found that: (1) There is no significant difference in viewing motivation between different genders and marital status, (2) There are significant differences in viewing motives for different ages, occupations, education levels, NBA viewing habits, the number of NBA viewings per week, the habit of engaging in basketball games, the number of basketball games per week, and whether they have watched basketball games live in the past. (3) Gender, age, occupation, education level, and whether you have watched a basketball game live in the past all have significant differences in viewing satisfaction. (4) There is a significant correlation in the correlation between participation motivation and satisfaction.

2.2 Satisfaction related theories

The earliest research on customer satisfaction should be Cardozo in 1965. He studied customer satisfaction by experimental operation and introduced the concept of customer satisfaction into the field of marketing. He believed that the improvement of customer satisfaction would increase customer satisfaction. Repurchase behaviour further influences customers to buy other products. Customer satisfaction is overall cumulative, that is, customers make a comprehensive measure of all their purchasing and consumption experiences Anderson, Fornell (1994).

2.3 Theories related to the sense of identity

The basic concepts and theories of the sense of identity are organized according to some previous literatures. The sense of identity mainly comes from psychology, and the team agrees with Wannand Branscombe (1993). This research takes social identity theory as the core theory and discusses it from the field of social psychology. From this theory, we can understand the selfishness of the in-group, from which the concept of identity can be deduced, which in turn affects satisfaction and loyalty. The social comparison theory proposed by Festinger (1954) points out that individuals need to compare various traits with others in order to judge the consequences of their actions.

2.4 Theories related to viewing motivation

Milne and McDonald (1999) developed the "Motivation of the Sport Consumer" (MSC), which is similar to Wann's (1995) SFMS, divided into four types of motivation, a total of 12 factors. The first 12 types of motivation are psychological well-being needs, which are three factors: "self-actualization", "self-esteem", and "value development". The second type of motivation is social needs, including "social connection" and "connection." The third type of motivation is personal needs, including three factors: "skilled skill", "sports aesthetics", and "stress release".

3. Research Methods

This section mainly states the research hypothesis and data analysis method according to the research purpose and the results of the literature discussion.

3.1 Research hypothesis

The aspects covered in the research structure of this study include viewing motivation, identity, and satisfaction. The research hypotheses corresponding to the research structure are summarized as follows.

H1 Are there any differences in the satisfaction of live audiences of the Women's Super Basketball League with different demographic variables.

H2 Whether there is a difference in the identification of the audience of the Women's Super Basketball League with different demographic variables.

H3 Whether there is differences in the viewing motives of the live audience of the Women's Super Basketball League with different demographic variables.

3.1.1 Research objects

This research questionnaire takes the audience of the twelfth season of WSBL as the research object. The questionnaire method is used to distribute the questionnaires at the WSBL competition site. It is distributed in Banqiao Gymnasium and Xinzhuang Gymnasium. The expected sample should have a considerable understanding of the WSBL and be able to respond to the questionnaire correctly and objectively.

3.1.2 Questionnaire pre-test

After the design of the first draft of the questionnaire is completed and before the formal test, the questionnaire will be pre-tested to test the reliability of the questionnaire and items that are not significant will be deleted. In this study, the first questionnaire pre-test was conducted at Banqiao Gymnasium on March 21, 2017. A total of 50 questionnaires (all valid questionnaires) were

collected from 50 on-site spectators as the pre-test sample.

In terms of the reliability of the questionnaire, the test method of this study is verified by the Cronbach's α coefficient, which is used to measure the consistency and stability of the items. Cronbach's α coefficient is a kind of internal consistency reliability, which is most commonly used in Likert scale method. The " α " coefficient is used to represent the internal consistency reliability of the scale. The higher the " α " coefficient, the more internal consistency of the scale. Consistency is better. This study used SPSS 20.0 statistical analysis tool to analyze the Cronbach's α value. The Cronbach's α value of all aspects and their factors exceeded 0.70 (Cruickshank 1965), viewing motivation 0.927, identity 0.835, and satisfaction 0.841. Therefore, the reliability of the pre-test questionnaire is judged to be good.

3.1.3 Formal testing

This study was formally tested on March 27 and 29, 2017 in the Republic of China. 400 questionnaires were distributed to the Xinzhuang Gymnasium by random sampling. A total of 400 questionnaires were collected, and invalid questionnaires with incomplete answers were deducted 50 questionnaires, a total of 350 valid questionnaires (87.5%).

3.2 Data Analysis Methods

This study uses SPSS20.0 statistical software package, with $\alpha=0.05$ as the significant level.

3.2.1 Reliability Analysis

This study will conduct reliability analysis after the questionnaire is collected. This study intends to use Cronbach's α as the reliability analysis to test the Cronbach's α value of each dimension (factor) (recommended to be > 0.7). The larger the α value, the greater the correlation between the items of the dimension (factor), its internal consistency is also higher.

3.2.2 Descriptive Statistics

It is mainly a description of the sample mean, variance and standard deviation of each research aspect (item) of the collected samples. Among them, the mean indicates the general opinion of the recovered samples on each dimension; the variance and standard deviation indicate the degree of dispersion of opinions among the samples.

3.2.3 Independent sample t test

The independent sample t test is suitable for the test of the mean of two samples. Therefore, this study will use the independent sample t test to analyze the gender, marital status of the subjects, and the choice of the venue for watching the game. Whether there

is a significant difference in the influence of dimensions such as "sense of identity" and "motivation to watch".

3.2.4 One-way analysis of variance (One-Way ANOVA)

When the independent variable is a categorical variable and the dependent variable is equidistant, but when there are more than three independent variables, the t test cannot be used, and the analysis of variance is used instead, because the t test can only be used for the difference between two categories at a time, so the single-factor variance analysis was used to analyze whether there were significant differences in the effects of age, education level, occupation, and number of viewings on "satisfaction", "identity", and "viewing motivation".

Chapter 4 Analysis Results

4.1 Reliability and Validity

4.1.1 Reliability

The Cronbach's α coefficient values of each aspect in this study are shown: the Cronbach's α values of satisfaction, identity, and viewing motivation are all greater than 0.8, indicating that the items of the same aspect are homogeneous, and the measurement items of each aspect are Have reliability.

4.1.2 Validity

The design of the questions in each aspect of the questionnaire in this research is based on reference and review of literature, and is designed after considering the characteristics of students in the women's Super Basketball League live audience. Before the official questionnaire is distributed, a pre-test is conducted, and the results of the pre-test questionnaire are used to check the suitability of each dimension and make adjustments. The questions and dimensions measured by the table are sufficient to cover the structure of audience satisfaction, identity, and viewing motivation. It should have certain content validity.

4.2 Narrative Statistics

The basic information of the audience of the Women's Super Basketball League in this survey includes gender, age, education level, occupation, and viewing times. The survey results showed that the respondents were mostly female (91.3%); the age group was mostly 21-25 years old (36.3%); the education level was mostly junior college (76.8%); the occupation was mostly students (46.0%); The viewing frequency is 1 to 3 times (42.8%).

4.3 Factor Analysis

4.3.1 Extraction of on-site audience satisfaction factors of the Women's Super Basketball League

Since there are 7 questions to measure the audience satisfaction of the women's Super Basketball League, factor analysis is used to extract simpler common factors, and the dimension analysis of audience satisfaction is used in this study. The factor extraction was performed by the Varimax method, and the factor rotation was performed by the Varimax method.

As a result, two common factors with eigenvalues greater than 1 were extracted. The eigenvalues were 3.756 and 1.482, and the percentages of explained variance were 53.651% and 21.166%, respectively. The cumulative percentage of variation was 74.817%, which was quite representative of the original data. The two factors are named "integrity" and "periphery" from the factor load behind the rotation axis.

4.3.2 The Extraction of Audience Identity Factors in Women's Super Basketball League

Since there are 15 questions to measure the audience's sense of identity in the Women's Super Basketball League, factor analysis is used to extract simpler common factors, and the dimension of audience identity is analyzed. This study uses the principal component analysis method in the factor analysis method. The factor extraction was carried out, and the factor rotation axis was carried out by the Varimax method. The factor analysis results showed that a total of 4 common factors with eigenvalues greater than 1 were extracted. %, 13.230%, 12.115% and 8.238%, the cumulative variation percentage of 67.544% is quite representative of the original data.

4.3.3 Extraction of Motivational Factors for Audience Watching in the Women's Super Basketball League

Since there are 15 questions to measure the audience's motivation to watch the women's Super Basketball League, this study uses the principal component analysis method in the factor analysis method to perform factor extraction, and uses the Varimax method to perform factor rotation. The factor analysis results can see the co-extraction Four common factors with eigenvalues greater than 1 were found. The eigenvalues were 8.577, 1.986, 1.366 and 1.289, and the percentages of explained variation were 37.291%, 8.637%, 5.939% and 5.605%, respectively. The cumulative percentage of variation was 57.471%, which is quite possible. represents the original data.

4.4 Quarter assignments

4.4.1 Analysis of the audience satisfaction of the Women's Super Basketball League

This question has a total of 7 questions, mainly to discuss whether the overall and peripheral satisfaction of the audience of the Super Basketball League is satisfied, including whether it is a correct decision and a wise choice to watch WSBL on site; There are 7 items including hardware facilities, the services provided on site, the convenient transportation of the competition venue, and the overall opinion that watching WSBL on site is satisfactory. The survey results show that "it is the right decision to watch WSBL on site" accounted for 4.62, followed by "It is a wise choice to watch the WSBL live" accounted for 4.60, and then "overall, I think it is satisfactory to watch the WSBL live" accounted for 4.30; and "convenience to the WSBL competition venue" accounted for 3.73, the fewest, followed by "for WSBL's schedule", "for WSBL competition venue hardware facilities", "for WSBL on-site services" all accounted for 3.76. According to research, the audience of the Women's Super Basketball League was satisfied that "it was the right decision to watch the WSBL live", while they were less satisfied with "the convenient transportation of the WSBL venue".

4.4.2 Analysis of the audience's sense of identity in the Women's Super Basketball League

There are 15 questions in this question, mainly to explore whether the audience at the Women's Super Basketball League agree with the four factors: basketball identification, team identification, coach identification, and player identification. The survey results show, "I think watching basketball games and related news are in "Life is a fun pastime" accounted for the highest at 4.40, followed by "During the season, I would frequently get news about the teams I support through media such as TV, newspapers or the Internet" accounted for 4.08, Next is "Watching basketball is very important to me" at 4.00; "I am a supporter of a certain coach" at 3.07 is the least, followed by "I identify with this team because I appreciate this team" Coaches" accounted for 3.17. According to the research, the audience of the Women's Super Basketball League is more agree with "watching basketball games and related news is a fun pastime in life", while "I am a supporter of a certain coach" is less satisfied.

4.4.3 Analysis of the motives of the audience watching the Women's Super Basketball League

This question has a total of 23 questions, mainly to explore whether the audience of the Women's Super Basketball League agrees with the four factors of social connection and sports knowledge, sense of achievement, sports aesthetics, and player charm in viewing motivation. There is an indescribable

quality that attracts me” and “I look forward to seeing evenly matched WSBL games” both have the highest scores at 4.46, followed by “I like watching exciting WSBL games” with 4.36, and “I like watching exciting WSBL games” Delicacy and beauty of basketball games” accounted for 4.34; while “players’ bodybuilding is the reason that attracts me to watch WSBL games” accounted for the smallest number at 3.14. According to research, the audience of the Women's Super Basketball League scene believes that "the players' toned body is the reason that attracts me to watch the WSBL game", but they do not agree.

4.5 Independent sample t-test

4.5.1 Analysis of the audience's gender on satisfaction

In order to explore whether the satisfaction of live audience is different due to gender, the t test of the average of the two was carried out, and the t test analysis of the results of gender in the satisfaction of live audience was carried out. It was found that male > female on the factor of "integrity"; female > male on the factor of "peripheral", but the gap was not significant, so there was no significant difference in satisfaction between males and females.

4.5.2 Analysis of the gender of the audience on the sense of identity

In order to explore whether the audience's sense of identity is different due to gender, the t-test of the average of the two was carried out, and the t-test analysis of the result of gender in the audience's sense of identity was carried out. It was learned that in terms of "basketball identification", "team identification", "coach identification", and "player identification", all were male > female, but the gap was not significant, so there was no obvious difference between male and female in terms of identification.

4.5.3 Analysis of the audience's gender on viewing motivation

In order to explore whether the audience's viewing motivation differs according to gender, the t-test of the average of the two was carried out, and the t-test analysis of the results of gender in the audience's viewing motivation was carried out. It was learned that the factors of "social connection and sports knowledge", "sports aesthetics", and "player charm" were male > female; only the factor of "sense of achievement" was female > male, but the gap was not significant, so male and female There is no discernible difference in motivation for viewing.

4.6 One-Way Analysis of Variation

4.6.1 The single factor variance of audience age group and satisfaction

In order to explore whether the satisfaction of live audience differs by age group, a single factor variance analysis of the average of the two was carried out, and the analysis results showed that the audience's age group had a "wholeness" ($F = 3.588$) and "peripheral" ($F = 9.173$), a very significant difference was reached; after comparison with the Sheffield method, it was found that in the "peripheral" factor, those under the age of 20 (inclusive) > 31~35-year-old & 36-40 years old, different age groups reached extremely significant differences in the differences of satisfaction factors.

4.6.2 The single factor variance of audience age group and sense of identity

In order to explore whether the audience's sense of identity is different due to age groups, a single-factor variance analysis of the mean of the two was conducted. The analysis results showed that there was no significant difference in the sense of identity among the audience's age groups.

4.6.3 The single factor variance of audience age group and viewing motivation

In order to explore whether the audience's viewing motivation is different due to age groups, a single-factor variance analysis of the mean of the two was carried out. ($F=2.653$), there was a significant difference in the factor, and there was no significant difference in the rest.

4.6.4 The single factor variance of audience education level and satisfaction

In order to explore whether the audience satisfaction is different due to their educational level, a single factor variance analysis of the average of the two was carried out. The results of the analysis showed that the educational level of the audience was related to the “periphery” of different educational levels ($F = 7.487$), and there was a significant difference in the factors; after comparison with the Snow-Fee method, it was found that in the factor of "peripheral", there was no significant difference between high school (inclusive) and below & college > research institute, and the rest.

4.6.5 The single factor variance of the audience's educational level and sense of identity

In order to explore whether the audience's sense of identity is different due to their educational level, a single factor variance analysis of the mean of the two was carried out. The analysis result showed that there was no significant difference in the sense of identity of the audience's educational level.

4.6.6 The single factor variance of the audience's educational level and viewing motivation

In order to explore whether the audience's viewing motivation is different due to their educational level,

a single factor variance analysis of the mean of the two was carried out. The analysis results showed that there was no significant difference in the audience's educational level in viewing motivation.

4.6.7 The single factor variance of audience occupation and satisfaction

In order to explore whether the satisfaction of the on-site audience varies by occupation, a single-factor variance analysis of the average of the two was carried out. The analysis results showed that the satisfaction of the on-site audience's occupation was based on the "periphery" of different occupations ($F=5.165$). There were very significant differences in the factors, and no significant differences were found in the rest.

4.6.8 The single factor variance of the audience's occupation and sense of identity

In order to explore whether the audience's sense of identity differs according to occupation, a single-factor variance analysis of the average of the two was carried out. The analysis results showed that the audience's sense of identity was based on the "team identity" of different occupations ($F=3.285$) factors reached a significant difference. After comparing with the Snow-Fee method, it was found that in the factors of "team identity", industry and commerce > military and public education, and the rest had no significant differences.

4.6.9 Single factor variance of audience occupation and viewing motivation

In order to explore whether the audience's viewing motivation differs by occupation, a single factor variance analysis of the mean of the two was conducted. The analysis results showed that there was no significant difference in the viewing motivation of the audience's occupation.

4.6.10 Single-factor variation of on-site audience viewing times and satisfaction

In order to explore whether the satisfaction of live audiences is different due to the number of viewings, a one-way variance analysis of the average of the two was carried out, and the results of the analysis of the "integrity" ($F = 4.726$) and "periphery" ($F = 4.854$), and there were significant differences in these two factors. After comparison with the Sheffield method, it was found that in the "integrity" factor, 7-10 times > 1-3 times, On the "peripheral" factor, 1-3 times > 4-6 times.

4.6.11 Single-factor variance of on-site audience viewing times and sense of identity

In order to explore whether the audience's sense of identity is different due to the number of viewings, a single-factor variance analysis of the average of the two was carried out. The analysis results showed

that the number of audiences viewed on-site was different from the "basketball identity" ($F = 2.891$) and a very significant difference in the "team identification" ($F = 13.547$) factor. After comparison with the Snow-Fee method, it was found that in the "team identification" factor, 7-10 times & 10 More than 1-3 times & 4-6 times, the rest have no significant difference.

4.6.12 The single factor variance of the number of on-site audience viewing and viewing motivation

In order to explore whether the audience's viewing motivation is different due to the number of viewings, a single-factor variance analysis of the average of the two was carried out. = 4.118) and "sports aesthetics" ($F = 3.715$), and there were no significant differences in the rest.

After synthesizing the above data analysis, the different background variables of the audience also showed significant correlation among the variables in terms of satisfaction, identity, and viewing motivation. The detailed research hypothesis was verified and sorted.

Chapter 5 Conclusion

This study mainly explores the viewing behavior of WSBL audiences, including satisfaction, identity, and viewing motivation. Through the questionnaire survey method, the collected data are collected and archived, and the effective samples are analyzed by statistical methods such as reliability and validity, descriptive statistics, factor analysis, frequency allocation, independent sample T test, and one-way ANOVA. Analysis and verification to understand the audience's participation and viewing behaviour, as a reference for the league and the team's future marketing of WSBL.

This research mainly explores the relationship between satisfaction, identity and viewing motivation from the perspective of WSBL live audiences in the twelfth season, and draws the following conclusions according to the results of the questionnaire analysis.

5.1 In terms of the basic personal information of the audience, the gender of the audience is 91.3%. It can be seen that men are less likely to watch the women's Super Basketball League. The age is 21-25 years old, accounting for 36.3%, and the education level is 76.8%. Most of them are college students, and the number of viewings is 1-3 times, accounting for 42.8%. There are 40 games in total. It can be seen that fans are still in the doldrums.

5.2 On the average of the audience's satisfaction with the analysis, the top three high scores are

mainly "correct decision", "wise choice" and "satisfactory arrangement", indicating that the audience is satisfied with their presence at the game. The scores are very high; the top three high scores in the analysis of the audience's average sense of identity are "basketball is a pastime in daily life", "watching basketball games is very important" and "using various media to obtain relevant game information" shows that the audience has a high degree of recognition of basketball-level games; the top three high scores are mainly "closely matched games", "exciting games" and "basketball games have delicate and delicate". "With Beauty" shows that the audience is highly competitive, exciting, yet delicate and beautiful.

5.3 Carry out factor analysis on the question of satisfaction, and get two dimensions, namely "integrity" and "periphery". The difference between the factor dimensions is quite large. It is suggested that the schedule and transportation convenience should be improved in order to attract more spectators to watch the event. Factor analysis was carried out on the question of identity, and four dimensions were obtained, namely "basketball identity", "team identity", "coach identity" and "player identity". The reason for the discrepancy in the sense of identity comes from the fact that fans are generally less familiar with coaches. It is suggested that coaches can cultivate more basketball connotations. Factor analysis was carried out on the question of viewing motivation, and four dimensions were obtained, namely "sports knowledge and social connection", "sense of achievement", "sports aesthetics" and "player charm". The reason for the difference between the live audience and the live audience comes from the "player charm". Fans are not very attractive to the player's body or appearance. It is recommended that players can improve their basketball skills.

5.4 The differences of demographic variables in each research variable are compared as follows:

(1) There are significant differences in satisfaction among different audience demographic variables. In terms of marital status; unmarried subjects are more satisfied than married subjects; Banqiao Gymnasium is higher than Xinzhuang Gymnasium in terms of viewing venues; the satisfaction level of subjects under the age of 20 (inclusive) is greater than that of 31-35 years old & 36-40 years old ;In terms of education level, the satisfaction of high school vocational (inclusive) and below and colleges and universities is higher than that of research institutes; in terms of residence, the satisfaction of audiences from New Taipei City and

other regions is higher than that of Taipei City; The satisfaction rate is greater than 4-6 times.

(2) There is no significant difference in the sense of identity among the demographic variables of different audiences. In terms of gender, there is no significant difference in the sense of identity between men and women; the satisfaction of unmarried subjects is higher than that of married subjects; there is no significant difference in the choice of two venues for the sense of identity in terms of viewing venues; occupational aspect , Industry and commerce are higher than military and public education; in terms of viewing times, those who have watched 7-10 times and more than 10 times are higher than those who have watched 1-3 times and 4-6 times.

(3) There are significant differences in viewing motives for different audience demographic variables, except for unmarried and married people. In terms of gender, there was no significant difference in viewing motivation between men and women.

Reference

- Anderson E., Fornell C., & Lehmann D. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of Marketing*, 58(3), 53-66
- Branscombe, N. R. & Wann, D. L. (1991). The positive social and self concept consequences of sports team identification. *Journal of Sport and Social Issues*, 15(1), 115-127.
- Cardozo, R. N. (1965). An experimental study of customer effort, expectation and satisfaction. *Journal of Marketing Research*, 2, 244-249.
- Festinger, T. (1983). *No one ever asked us... A postscript to foster care*. New York: Columbia University Press.
- Wann, D. L. (2002). Preliminary validation of a measure for assessing identification as a sport fan: The sport fandom questionnaire. *International Journal of Sport Management*, 3, 103-115.
- Wann, D. L., & Branscombe, N. R. (1993). Sports fans: Measuring degree of identification with their team. *International Journal of Sport Psychology*, 24(1), 1-17.

References:

- [1] Anderson E., Fornell C., & Lehmann D. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of Marketing*, 58(3), 53-66
- [2] Branscombe, N. R. & Wann, D. L. (1991). The positive social and self concept consequences

of sports team identification. *Journal of Sport and Social Issues*, 15(1), 115-127.

- [3] Cardozo, R. N. (1965). An experimental study of customer effort, expectation and satisfaction. *Journal of Marketing Research*, 2, 244-249.
- [4] Festinger, T. (1983). No one ever asked us... A postscript to foster care. New York: Columbia University Press.
- [5] Wann, D. L. (2002). Preliminary validation of a measure for assessing identification as a sport fan: The sport fandom questionnaire. *International Journal of Sport Management*, 3, 103-115.
- [6] Wann, D. L., & Branscombe, N. R. (1993). Sports fans: Measuring degree of identification with their team. *International Journal of Sport Psychology*, 24(1), 1-17.

Contribution of individual authors to the creation of a scientific article (ghostwriting policy)

Tsung-Ling Hsieh was responsible for the Statistics. Jih-Lian Ha carried out the simulation and the optimization.

Follow: www.wseas.org/multimedia/contributor-role-instruction.pdf