

**Testing a structural model of constraints negotiation in spectator sports: The moderating effect of satisfaction with marketing strategies**

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**TESTING A STRUCTURAL MODEL OF CONSTRAINTS NEGOTIATION IN  
SPECTATOR SPORTS: THE MODERATING EFFECT OF SATISFACTION WITH  
MARKETING STRATEGIES**

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## ABSTRACT

This study extends the leisure constraints literature and empirically tests the constraints-effects-mitigation model within the context of spectator sports. The moderating effects of satisfaction with marketing strategies on the constraints negotiation relationship, and the motivation and negotiation relationship were also examined. Data (n = 997) were collected from spectators attending Chinese Professional Baseball League (CPBL) games during the regular seasons in 2014 and 2015. Results showed that 1) negotiation works to independently influence participation; 2) the relationship between motivation and participation is partially mediated by negotiation strategies; 3) the relationship between motivation and negotiation is moderated by satisfaction with marketing strategies; and 4) constraints have no significant influence on participation and negotiation. The results advance our understanding of the factors influencing consumers' leisure participation and the decision-making mechanism. This could help professional sport teams develop more effective and targeted marketing strategies. The findings may also help enrich sport spectators' consumption of leisure experiences.

**Keywords:** Constraints; Negotiation; Motivation; Sport Marketing; Professional Sport

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**INTRODUCTION**

Sports consumption is one of the largest industries in the world; in the United States (where much relevant research has been done), it is estimated to be valued at \$472 billion, of which spectator sports form a major part worth \$33.1 billion (Plunkett Research, 2016). Gate revenue remains the largest single segment of income at \$19.1 billion, and a modest 3.9% annual growth is expected (Van Riper, 2013). Ticket sales play a critical part and contribute from 20% to 50% of the total revenue stream for the four big USA professional sport organizations (MLB, NFL, NBA, and NHL) (Kim & Trail, 2010). Spectators' attendance is thus important to sport teams' revenue growth. However, knowing why spectators attend (i.e., their motives) or do not attend (i.e., the constraints) events is also vital in understanding how to build a sport consumer base and retain its volume (Funk, 2008; Pritchard, Funk, & Alexandris, 2009). Even more important for sport teams is knowing how to encourage individuals to overcome constraints and become sport consumers. Funk (2008) indicated that sport marketing strategies could facilitate a successful constraints negotiation process among sport consumers as part of their decision making. One of the strategies is to utilize marketing mix (i.e., product, price, place, promotion, etc.). Thus, sport consumers' satisfaction with marketing strategies may help decrease constraints to participation in sporting events (Yamashita & Harada, 2015). The constraint negotiation process is a complex interrelationship between motivation, constraints and negotiation, and is helpful in elucidating the relationship between spectators' satisfaction and any constraints (Yamashita & Harada, 2015). In this context it is beneficial for sport managers and marketers to

understand the factors affecting consumer decisions to attend sporting events, and the strategies used in constraint negotiation.

Professional sport in Taiwan provides a useful and informative case-study of issues relating to consumption and marketing of professional sports. Whilst baseball is popular worldwide, in Taiwan it is the most popular spectator sport. Thus, choosing the Chinese Professional Baseball League (CPBL) for data collection provides a good exemplar for spectator sport consumers in that country. The CPBL was founded in 1989 and grew consistently, with a 9% average annual attendance growth rate until 1996. Despite this, the sport experienced a rapid decline in attendance from an average of 5,488 spectators per game in 1995 down to 1,676 spectators per game in 2000, and thereafter experiencing fluctuations in game attendance until 2012. In 2013, an average of 6,079 spectators per game was reached – the highest number since 1992. This rise is attributed to the good performance of the national team in the World Baseball Classic and Manny Ramirez's participation in the CPBL (PM Magazine, 2013).

However, such external motivators only partly answer the question of why people purchase tickets and attend sporting events. Other motivators (Hu, 2006; Wu, 2009; Wu, 2011; Tsai, 2007) and constraints (Chen, 2012; Wu, 2009; Wu, 2011) to attending CPBL games have also been examined. While motivations and constraints relating to CPBL consumers have been understood (Wu, 2009; Wu, 2011), marketing strategy is also an important factor affecting spectator attendance. Once appropriately employed, sport organizations can benefit from significantly increased attendance, and *vice versa*. For example, McDonald and Rascher (2000) examined how promotions affected Major League Baseball and found that promotional games had increased attendance of about 3,893 fans per game. This contributed to an average increase in attendance of 14%, confirming that promotions can affect short-term demand for baseball

games. Zhang, Pease, Hui, and Michaud (1995) suggested that promotions affect spectator decisions to attend NBA games, and Zhang, Lam, and Connaughton (2003) found that marketing influenced consumption of live and televised professional sporting events. However, research by Chen (2012) on attendance constraints at CPBL games found that insufficient marketing effort negatively influenced intention to attend. Wu (2009) examined the motivation and constraints of CPBL spectators and found that marketing strategies triggered attendance, even if perceived structural constraints (e.g. inconvenient stadium access, inaccessible parking, and poor facilities and equipment) remained high. This suggests that satisfaction triggered by marketing strategies moderates the relationship between constraint and negotiation, and between motivation and negotiation.

A number of studies have examined constraints (Baade & Tiehen, 1990; Chen, 2012; Hansen & Gauthier, 1989; Pan, Gabert, McGaugh, & Branvold, 1997; Pritchard et al., 2009; Trail, Robinson, & Kim, 2008; Zhang et al., 1997) or constraints in conjunction with motives (Kim & Trail, 2010) in relation to spectator attendance. However, the constraints negotiation process, which was first developed in leisure behaviour studies (Jackson, Crawford, & Godbey, 1993), has received less attention. Regarding constraints negotiation, spectator attendance probably depends less on the absence of constraints than on spectators' capacity to negotiate through them. Despite considerable research on constraints in the sport management field, a conceptual model to guide constraint research is still lacking. Although a limited amount of research (e.g. Hung, Chen, & Peng, 2013) has examined constraints together with constraint negotiation, motivation, and participation, which are considered key variables in the constraint negotiation research (Loucks-Atkinson & Mannell, 2007; Lyu, Oh, & Lee, 2013; Tsai & Coleman, 2009; White, 2008), no research to date has jointly examined these variables in

spectator sport. Thus, using a conceptual model to examine the variables in spectator sport such as CPBL, as suggested by Kim and Trail (2010), might assist teams and leagues in understanding the reasoning underlying the choices of frequent attendees and thus improve our knowledge of constraints.

This research makes two main contributions to the field. Firstly, the existing literature provides a ready constraint negotiation model (constraint-effects-mitigation model) in the leisure study field (Hubbard & Mannell, 2001), but it has not been applied to spectator sports. The model proposed and then examined in the context of leisure-time participation in physical activity should also be tested in non-participatory situations such as spectator sport. Previous studies suggest that testing of the constraint negotiation model remains inconclusive (Hubbard & Mannell, 2001; Loucks-Atkinson & Mannell, 2007; Son, Mowen, & Kerstetter, 2008; White, 2008). Furthermore, spectator sport studies have explored constraints and motivations to attendance (Kim & Trail, 2010; Trail & Kim, 2011), but need to further clarify how negotiation adds to the relationships. Thus, the current study provides further insight into the mitigation model's cross-validation in the context of spectator sport. Secondly, it is worth considering the application of moderators that shape perceptions of constraints and the relationships between constraints and related negotiation processes (Godbey, Crawford, & Shen, 2010). The spectator sport literature also suggests that marketing communication strategies could both facilitate (increase motivation) and alleviate (reduce constraints) attendance (Kim & Trail, 2010). However, this has not yet been explored. It is therefore uncertain whether the satisfaction levels of marketing strategies play dual roles in the mitigation model. To fill the current gaps in understanding, this study aims to (1) examine the relationships between event motivation (EM), event constraints (EC), event negotiation (EN), and event participation (EP), and (2) clarify how

satisfaction with marketing strategies (SMS) as a moderator influences event constraint negotiation. This refers to the relationships that event negotiation shares with both event constraint and event motivation.

## LITERATURE REVIEW

### *Scholarship on Leisure Constraint*

Leisure constraints are factors that negatively affect how individuals participate in and enjoy leisure (Jackson, 2000). However, people are likely to find ways to alleviate the influence of such constraints, denoting the concept of constraints negotiation (Jackson, Crawford, & Godbey, 1993). The tripartite definition of leisure constraints (i.e. intrapersonal, interpersonal, and structural), as well as paired negotiation strategies (i.e. cognitive strategies and behavioural) are most commonly used in research on leisure constraints negotiation (e.g. Little, 2002; Son et al., 2008). Recent research on leisure constraints negotiation has centred on constructing and testing conceptual models, mainly based on Hubbard and Mannell's (2001) four alternative models: the independence model, the negotiation-buffer model, the constraint-effects-mitigation model, and the perceived-constraint-reduction model. Hubbard and Mannell (2001), Covelli, Graefe, and Burns (2007), Loucks-Atkinson, and Mannell (2007), Son et al. (2008), and Wilhelm Stanis, Schneider and Russell (2009) have contributed to either supporting or modifying the constraints-effects-mitigation model. People with more perceived constraints probably continue their participation in leisure activities and actually participate more than those with fewer constraints (Kay & Jackson, 1991). Furthermore, negotiation strategies may play dual roles as facilitators and negotiators. When negotiation strategies operate independently to the relationship between constraint and participation, they are viewed as facilitators. On the other hand, negotiation strategies operating as a mediator between constraint and participation are considered

as negotiators. Built on the theoretical foundation of the leisure constraint negotiation model (i.e., the constraint-effects-mitigation model), our research tested the approach in the context of spectator sports, which is different from most studies using samples of participatory leisure activities. The constraints-effects-mitigation model was adopted mainly because it is most appropriate to address individuals' leisure participation after comparing the four competing models (Hubbard & Mannell, 2001; Lyu et al., 2013). In addition, the spectator sport literature (Kim & Trail, 2010) also suggests that marketing communication strategies could play multiple facilitator (increasing motivation) and alleviator (alleviating constraints) roles in increasing attendance. Thus, we examined how marketing strategies satisfaction moderates the relationships between constraints and negotiation, and between motivation and negotiation.

The leisure constraints research spans 20 years (Godbey et al., 2010), with Crawford and Godbey (1987) first addressing the constraints concept on the assumption that the presence of constraints completely blocks subsequent leisure participation. They defined constraints in three ways: intrapersonal, interpersonal, and structural. Intrapersonal constraints are defined as individual psychological states and attributes that interact with leisure preferences. Some of the examples include anxiety, stress, depression, and subjective assessment of the suitability and availability of leisure activities. Interpersonal constraints refer to those that arise out of social interaction with others such as friends or family who have similar or different preferences for leisure activities. In this sense, negative relationships with others, such as colleagues, increases perceived interpersonal constraints. Structural constraints are external factors, including lack of time, money, or inaccessibility, that act as a barrier between leisure preferences and participation (Crawford & Godbey, 1987).

The constraints and their negotiation are being applied in wider contexts like tourism and

recreation. Hung et al. (2013) examined the factors affecting pet owners' decisions when taking part in tourism activities and found significant negative correlation between constraints and participation. Ghimire, Green, Poudyal, and Cordell (2014) used a national household survey to examine perceived constraints to outdoor recreation activities of ethnic minorities and marginalized groups in the USA. They found ethnic minorities, older people, females, and rural dwellers perceived more constraints than their respective counterparts, and these were linked to the three constraint types. Metcalf, Graefe, Trauntvein, and Burns (2015) examined a typology of female hunters in terms of factors constraining participation, and negotiation strategies used to overcome constraints. Among four groups, family-oriented hunters were the most likely to perceive constraints and to use negotiation strategies to increase their participation in hunting. Gao and Kerstetter (2016) examined older Chinese females' perceived constraints to pleasure travel and their negotiation strategies and found eight travel constraints and six negotiation strategies linked to intrapersonal, interpersonal and structural constraints. More recently, Chen, Lou, and Ma (2018) examined relationships between positive emotions, constraints, negotiation strategy, and participation frequency in outdoor recreational activities among Taiwanese students. They found that participation did not depend on constraints but on the process of negotiation.

### ***Hypotheses Development***

Regarding sport consumer behaviour, factors negatively influencing attendance include lack of success (Kim & Trail, 2010), stadium location (Hansen & Gauthier, 1989; Pan et al., 1997), lack of team success (Baade & Tiehen, 1990; Hansen & Gauthier, 1989), alternative leisure activities (Hansen & Gauthier, 1989; Kim & Trail, 2010), and financial cost (e.g. ticket price) (Zhang, Pease, Hui, & Michaud, 1995). Trail and Kim (2011) examined factors influencing spectators' attendance of NCAA women's college basketball and found that internal

and external constraints had significant negative impacts on attendance intention. The study investigating constraints on non-attendees' attendance at the CPBL identified lack of interest, poor CPBL games and players, lack of knowledge, accessibility of the stadium, and insufficient marketing efforts as factors influencing intention to attend games (Chen, 2012). In addition to sport consumers, the negative relationship between constraints and participation has been consistently supported by leisure studies (e.g. Son et al., 2008; White, 2008). However, Wilhelm Stanis et al. (2009) and Chen et al. (2018) found that constraints had no significant effect on participation when other variables (e.g. negotiation and motivation) were controlled. Although inconsistent results were reported, based on most empirical studies reporting significant relationships between them, the first hypothesis of this study is formulated as follows:

H1: Event constraint has a direct negative effect on event participation.

Empirical testing of the relationship between constraint and negotiation showed diverse results. In line with Hubbard and Mannell's (2001) mitigation model, Chen et al. (2018), Loucks-Atkinson and Mannell (2007), and White (2008) found that constraints had significantly positive effects on negotiation. In contrast, Ma and Ma (2014), Son et al. (2008), and Wilhelm Stanis et al. (2009), found no significant relationship. Despite the inconsistent results reported, based on Hubbard and Mannell's (2001) mitigation model and empirical studies, the second hypothesis is:

H2: Constraint has a direct positive effect on negotiation.

Most studies on leisure constraints prior to the early 1990s examined factors deterring people from participation in preferred leisure activities (Jackson & Scott, 1999). The concept has further evolved with an understanding that constraints once encountered might be negotiated (Crawford, Jackson, & Godbey, 1991; Kay & Jackson, 1991; Scott, 1991). Thus, participation decisions are not attributed to the absence of constraints, but rather the success of the negotiation

process (Jackson et al., 1993). Individuals can alleviate leisure constraints by using diverse negotiation strategies, classified into cognitive and behavioural. The selected strategies mainly depend on the specific constraints encountered. For example, when faced with time constraints, some individuals try to reduce time spent on household chores and reduce their work time (behavioural strategies) (Kay & Jackson, 1991). When faced with an absence of companions, some try to ignore those constraining factors (cognitive strategies) (Jackson & Rucks, 1995). Other commonly-used negotiation strategies include skill acquisition, changing interpersonal relations, improving finances, physical therapy, and changing leisure aspirations.

The role of negotiation efforts in individual leisure pursuits is emphasized in a constraints negotiation process (Jackson, 2005). Hubbard and Mannell (2001) modelled the constructs of motivation, constraint, negotiation, and participation to suggest a direct path between motivation and participation with negotiation mediating the relationship. Carroll and Alexandris (1997) suggested that motivation directly affects participation, and a study on attendees of women's professional basketball games found that team attachment (internal motivator) positively related to attendance (Kim & Trail, 2010). Loucks-Atkinson and Mannell (2007) and White (2008) found that motivation directly and positively influences participation and acts as a potential trigger encouraging the constraint negotiation process. Son et al. (2008) tested the constraint negotiation process by examining volunteers and visitors aged over 50 years in a metropolitan park. The results showed that negotiation fully mediates motivation-participation relationships. Wilhelm Stanis et al. (2009) tested Hubbard and Mannell's full constraints-effects-mitigation model in the physical leisure-time activity of park visitors. The results generally support Hubbard and Mannell's model where negotiation partially mediates the motivation-participation relationship. Based on Hubbard and Mannell's model (2001), and on empirical studies, the

following hypotheses are proposed:

H3: Negotiation has a direct positive effect on participation.

H4: Motivation has a direct positive effect on participation.

H5: Motivation has a direct positive effect on negotiation.

### ***Moderating Effect of Marketing Strategies Satisfaction***

Inspecting moderating variables facilitates event managers' understanding of how managing a sporting event might impact on individuals. A sport marketing scholar (Funk, 2008) suggested that marketing strategies such as marketing mix can allow sport consumers to both negotiate the constraints and facilitate the negotiation process as part of decision making. The most common method is by incorporating the '4 P's' of the marketing mix: product, price, place, and promotion. For instance, the team can create flexible ticket packages when spectators feel the venue is crowded and do not want to go there. If spectators feel that stadium access from the nearest bus station is unsatisfactory during the regular season, the team can run a bus for them and thereby decrease attendance constraints (Yamashita & Harada, 2015). Although spectators' satisfaction with marketing strategies is suggested to influence constraint negotiation success, there is limited empirical research testing the assertion. This study therefore aims to bridge the gap by testing the influences of spectators' satisfaction with marketing strategies relating to the marketing mix on the event constraint negotiation process.

Previous studies (McDonald & Rascher, 2000; Zhang et al., 1995) indicated that promotional efforts positively affect spectator attendance at MLB and NBA games. Shih and Huang (2009) verified that CPBL fans' participation behaviour associated with the sport marketing mix (i.e. product, price, place, promotion, and public relations) significantly influenced satisfaction with marketing strategies. Wu (2009) examined the motivation and

constraints of CPBL spectators and found that marketing strategies trigger attendance even when the perceived structural constraints remained high. Wang (2010) examined the relationships between leisure constraints and perceived improvement measures by testing CPBL fans. The findings indicated a significant relationship between structural constraints (e.g. ticket prices, accessibility, game-fixing, weather, stadium facilities, etc.) and perceived improvement measures, one of which suggests a positive relationship between perceived improvement measures to CPBL teams' marketing strategies and fans' structural constraint. Fans most concerned about the constraints of the CPBL environment are more likely to expect improvement measures. In other words, if CPBL teams' marketing strategies are well targeted and communicated to CPBL fans, constraints deterring fan participation are more likely to be negotiated. Chen (2012) investigated constraints to attendance at CPBL games and found that insufficient marketing efforts negatively reflected intention to attend CPBL games. Santos-Lewis and Moital (2013) examined the constraints to attending salsa events and festivals and suggested the need for further work on how event marketing can aid constraint negotiation to improve attendance. Conversely, despite our understanding of how motivation influences participation through negotiation (Covelli et al., 2007; Hubbard & Mannell, 2001; Son et al., 2008), the changing relationship with different population segments in various settings is less clear (Wilhelm Stanis et al., 2009). Few event studies have explored the interaction effect between motivation and satisfaction. For example, Lee, Lee, and Wicks (2004) examined visitors' motivation to attend the 2000 Kyongju World Culture Expo and found that visitors' overall satisfaction interacted with different motivation factors. This suggested that groups with various motivations for attending the event had different satisfaction levels. The spectator sport literature also suggests that marketing communication strategies could play the dual roles of facilitator

(increasing motivation) and alleviator (reducing constraints) in increasing attendance (Kim & Trail, 2010). Consequently, the following hypotheses are proposed:

H6<sub>a</sub>: Satisfaction with marketing strategies moderates the effect of EC on EN such that high satisfaction with teams' marketing strategies strengthens the positive effect of EC on EN.

H6<sub>b</sub>: Satisfaction with marketing strategies moderates the effect of EM on EN such that high satisfaction with teams' marketing strategies strengthens the positive effect of EM on EN.

Past studies have examined the relationships between motivation, constraints, negotiation and participation. However, these relationships continue to be revised and warrant further testing with other factors in different scenarios (Covelli et al., 2007; Hubbard & Mannell, 2001; Loucks-Atkinson & Mannell, 2007; Son et al., 2008; Wilhelm Stanis et al., 2009). Therefore, the researcher applied Hubbard and Mannell's full constraints-effects-mitigation model in the context of spectator sports and more importantly tested the moderating effects of satisfaction with marketing strategies on the relationships between constraints, motivation, and negotiation that to date have received no attention in the leisure behaviour literature. Figure 1 shows the hypothesized paths proposed in this study.

<<<Insert Figure 1 Here>>>

## METHODS

### *Participants and Measurement of the Constructs*

Participants were recruited by graduate students who collected data from spectators attending CPBL games during regular seasons in 2014 and 2015. Geographic areas covering north, central, and south Taiwan were actually surveyed. The questionnaire was initially created

in English and subsequently translated into Chinese. The translated items were sent to two bilingual individuals to translate the Chinese items into English to assure the content validity (Brislin, 1970). Questionnaires were distributed to spectators at the interval of every five reserved and bleacher seats in both home and guest games on weekdays and weekends. Responses were given on 5-point Likert scales (1 = *Strongly Disagree*, 5 = *Strongly Agree*) with 16 items for motivations (Funk, Mahony, Nakazawa, & Hirakawa, 2001; Wu, 2009) and 17 for constraints (Raymore, Godbey, Crawford, & von Eye, 1993). The motivation scale includes interest (6 items), fan (5 items), and baseball and entertainment (5 items). The constraint scale is a three-factor metric, including two intrapersonal, three interpersonal, and five structural items. To assess negotiation, respondents were asked to indicate the frequency with which they used the seven negotiation strategies on a 5-point Likert scale (1 = *never*, 5 = *very often*). The specific list of strategies in this scale is based on studies by Loucks-Atkinson and Mannell (2007), and White (2008). These strategies are grouped as follows: changing interpersonal relations (3 items), improving finances (2 items), and time management (2 items). The level of participation was evaluated with two measures. To assess the frequency and duration of the participants' attendance and support, respondents reported the frequency of attending CPBL games over the last year and their duration of supporting the team. The responses of frequency scores were then recoded into a 5-point Likert scale, where 1 = *never* (0 times), 2 = *seldom* (1~2 times), 3 = *sometimes* (3~5 times), 4 = *often* (6~10 times), and 5 = *very often* (11 times and above); responses of duration scores were recoded into a 5-point Likert scale where 1 = *seldom support* (0~5 years), 2 = *somewhat support* (6~10 years), 3 = *support* (11~15 years), 4 = *highly support* (16~20 years), and 5 = *extremely support* (21~26 years). Satisfaction with marketing strategies was measured on a 5-point Likert scale (1 = *very dissatisfied*, 5 = *very satisfied*). The list of items

includes statements of *product* (the variety of peripheral commodities, e.g. t-shirts, team uniform, accessories, mementos, etc.), *price* (ticket price and product price), *place* (the convenience of ticket and product purchasing), *promotion* (TV broadcasting, supporters club, summer camp, official website, advertising), and *PR* (charity activities, press conferences, campus activities, media reports) strategies (Huang & Shih, 2008; Shih & Huang, 2009).

The total number of respondents approached was  $N = 1,256$ , from whom  $N = 997$  valid responses (i.e. the number of completed questionnaires) were obtained (Table 1). This generated a 77.9% overall valid response rate. The demographic profile of the respondents indicated that 66.2% were male and 33.8% were female. They were predominantly aged between 20 and 29 years (43.6%), followed by 30 to 39 (26.1%), under 20 (18.0%), and above 40 (12.3%), and most were employed (40.4%) or students (38.0%). Three-quarters of the respondents (75.8%) were single. The education level for the largest percentage in the sample was college/university (59.6%) followed by vocational school (15.9%), graduate and above (13.2%), senior high school (8.0%), and junior high or below (3.2%). Most respondents had a monthly income of below NT \$50,000 or approximately US \$1,667 (74.2%). The respondents were composed of 28.7% supporters for the Brother Elephants, 23.1% for the Uni-President 7-Eleven Lions, 19.3% for the EDA Rhinos, and 19.2% for the Lamigo Monkeys. The majority of respondents attended the games with friends (62.6%), followed by family (26.6%), classmates (10.5%), individually (9.9%), and colleagues (7.4%). The average number of years supporting the team was 8.1 and the average frequency of watching on-site games was 10 times per year.

<<<Insert Table 1 Here>>>

### ***Data Analysis***

The data were analysed using SPSS 18.0 and LISREL 8.80. The statistical technique used

was structural equation modelling (SEM). A confirmatory factor analysis (CFA) using LISREL 8.80 was employed to confirm the factor structure of the measurement models, and the reliability, convergent, and discriminant validity of the main constructs were tested by standardized factor loadings, composite reliability (CR) and average variance extracted (AVE). Reliability assessment uses CR estimates and the recommended threshold is 0.70 (Fornell & Larcker, 1981). The significance of factor loadings (greater than 0.50) (Bagozzi & Yi, 1988) and AVE (greater than 0.50) (Fornell & Larcker, 1981) was used to assess convergent validity. Discriminant validity was examined and indicated when the AVE estimate for each construct exceeded the squared correlations between the respective constructs (Fornell & Larcker, 1981).

The structural model was evaluated using multiple fit indices. Statistically non-significant chi-square ( $\chi^2$ ), root mean square error of approximation (RSEA) of less than 0.08, and incremental fit index (IFI), comparable fit index (CFI), and normed fit index (NFI) greater than 0.95 (Hu & Bentler, 1999) were used as the criteria to indicate a close fit. Because the chi-square is sensitive to sample size and often inflates Type I error, relative chi-square ( $\chi^2/df$ ) was used. Ratios ranging from 3 to 1 indicated an acceptable fit between the hypothetical model and the sample data for large samples (Bollen, 1989). The potential moderating effect of SMS was tested with hierarchical regression analysis. The variables were entered in three steps. The control variable (gender) was entered in the first step, main effect in step 2, and two-way interaction terms in step 3. The sample was divided into two groups of high and low satisfaction levels of spectators using a median split. Gender was included as a control variable given that previous studies reported males as dominant participants of the CPBL on-site games (Hsieh & Wu, 2009; Shih & Huang, 2009; Yu, 2005). Furthermore, a previous study suggested a difference in gender based on structural constraints (Trail et al., 2008). To test whether the effect of EC and EM on EP

was mediated through EN, we used the SPSS macro PROCESS developed by Hayes (2013, model 4), which provides a tighter presentation of results.

## RESULTS

### *Measurement Model*

Table 2 presents the descriptive statistics for the constructs and internal reliability analysis. An alpha coefficient equal to or greater than 0.50 was the minimum acceptable criterion (Baumgartner & Jackson, 1999). All Cronbach's alpha values are greater than 0.67, indicating adequate internal consistency. The standardized factor loadings (SFL) of all indicators met the minimum criterion of 0.50, except for the indicator of changing interpersonal relations (SFL = 0.46). Previous research reported a low SFL for the negotiation indicator (changing leisure aspirations, SFL = 0.44) (White, 2008). The CRs ranged from 0.70 to 0.90, meeting the threshold value of 0.70. All AVEs were above 0.50, with the exception of event negotiation (AVE = 0.44). Similar results were found in previous research for negotiation (AVE = 0.49) (White, 2008), constraints (AVE = 0.38/0.45) (Son et al., 2008; Wilhelm Stanis et al., 2009) and motivation (AVE = 0.44) constructs (Wilhelm Stanis et al., 2009). The indicator and construct were retained in further analyses given that they showed good internal consistency and adequately represented the underlying construct. All square roots of AVEs were greater than the correlation coefficients of other constructs, indicating discriminant validity. Confirmatory factor analysis (CFA) with EM, EC, EN, EP, and SMS showed that the model fits the data well ( $\chi^2 = 366.5$ ,  $p = 0.000$ , d.f. = 92,  $\chi^2/\text{d.f.} = 3.98$ , RMSEA = 0.05, NFI = 0.96, CFI = 0.97, IFI = 0.97, GFI = 0.96) (Table 3).

<<<Insert Table 2 Here>>>

<<<Insert Table 3 Here>>>

### ***Testing of Hypotheses***

We tested the original constraints-effects-mitigation model and found an acceptable model fit ( $\chi^2 = 160.21$ ,  $p = .000$ , d.f. = 35,  $\chi^2/\text{d.f.} = 4.57$ , RMSEA= 0.06, NFI = 0.97, CFI = 0.97, IFI = 0.97, GFI=0.96). All but two hypothesized relationships are supported. Specifically, event constraint has no significant effect on event participation ( $\beta = -.07$ , n.s.) or on event negotiation ( $\beta = -.09$ , n.s.), and thus H1 and H4 were not supported. Event negotiation has a significant positive effect on event participation ( $\beta = .28$ ,  $p < .05$ ), supporting H2. Event motivation has significant positive effects on event participation ( $\beta = .11$ ,  $p < .05$ ) and event negotiation ( $\beta = .34$ ,  $p < .05$ ), thus supporting H3 and H5, respectively. Taken together, these results provide substantial evidence to conclude that the data supported the motivation, negotiation, and participation paths, but not the constraint, negotiation, and participation paths (see also Table 4). The results confirmed the mediating effect of EM on EP through EN (Effect = 0.11, SE = 0.02, 95% CI = 0.06 ~ 0.16).

The interaction term tested how satisfaction with marketing strategies as a moderator influences the relationship between EM and EN. The testing of H6<sub>a</sub> was dropped due to a non-significant relationship between EC and EN. H6<sub>b</sub> was tested using moderated multiple regression wherein EN was regressed onto the control variable (gender), dummy variable (SMS), and mean-centred predictors (EM). The results in Table 5 indicate that satisfaction with marketing strategies moderates the relationship between EM and EN ( $\beta = .16$ ,  $p < .01$ ). Specifically, for low satisfaction with marketing strategies, the simple effect is 0.21 ( $p < .01$ ). For high satisfaction with marketing strategies, the simple effect is 0.34 ( $p < .01$ ). The simple effect is stronger for high SMS than for low SMS, supporting H6<sub>b</sub>.

<<<Insert Table 4 Here>>>

&lt;&lt;&lt;Insert Table 5 Here&gt;&gt;&gt;

## DISCUSSION

### *Constraints-Effects-Mitigation Model*

The current study found that constraint did not significantly influence participation (Wilhelm Stanis et al., 2009; Chen et al., 2018) or negotiation (Ma & Ma, 2014; Son et al., 2008; Wilhelm Stanis et al., 2009). The current findings did not support the constraints-effects-mitigation model that negotiation mediated the relationship between constraint and participation (Hubbard & Mannell, 2001). Instead, negotiation independently influences participation. This is consistent with Ma and Ma (2014), Wilhelm Stanis et al. (2009), and Son et al. (2008), suggesting that the strategies and resources used by the respondents were facilitators rather than negotiators. However, the results are inconsistent with previous studies that found negative relationships between constraint and participation (Chen, 2012; Hung et al., 2013; Kim & Trail, 2010; Son et al., 2008; White, 2008) and positive relationships between constraint and negotiation (Chen et al., 2018; Hubbard & Mannell, 2001; Loucks-Atkinson & Mannell, 2007; White, 2008). There are two possible explanations for the findings. On the one hand, it may be due to the participatory nature of the samples of leisure activities used in most previous studies in contrast to the non-participatory samples in this work. Thus, our samples may either experience a lower level of constraints ( $M = 2.27$ ) or easily develop negotiation strategies to overcome constraints. They may therefore have already developed strategies to negotiate constraints to participation, irrespective of a wide variety of constraints that may evolve (Hubbard & Mannell, 2001). On the other hand, the current study looked at overall levels of constraint and negotiation, although specific constraints may have different influences on specific negotiation strategies to participation (Ma & Ma, 2014; Son et al., 2008). However, these relationships were not

examined in this study. As specific constraints (e.g. internal and external) of spectators were found to impact negatively on attendance intentions (Kim & Trail, 2010; Trail & Kim, 2011), future studies should consider how specific negotiation strategies relate to particular participation constraints.

Consistent with previous studies, negotiation strategies partly mediated relationships between motivation and participation (Loucks-Atkinson & Mannell, 2007; Whihelm Stanis et al., 2009). The findings, in line with White (2008), showed that motivation largely influences participation as a precursor and acts as a potential trigger for negotiation efforts. Similarly, the finding is in part consistent with Kim and Trail (2010) who found that motivation strongly and positively affects attendance of spectator sports. By contrast, the fully mediated relationship was supported in previous studies (Hubbard & Mannell, 2001; Son et al., 2008). These inconsistencies may result from using different participants and measures across the studies (Whihelm Stanis et al., 2009). In line with previous studies (Covelli et al., 2007; Hubbard & Mannell, 2001; Loucks-Atkinson & Mannell, 2007; Son et al., 2008), the path coefficients from motivation to negotiation and negotiation to participation were moderate to strong. Therefore, we confirm that motivation-negotiation-participation relationships are stable in different contexts, regardless of constraints.

### ***Is a Marketing Communication Strategy a Powerful Facilitator?***

The results confirm that a high level of marketing strategy satisfaction strengthens the degree motivation positively and affects negotiation. As noted by Kim and Trail (2010), a marketing communication strategy could be an effective way to strengthen fan motivators. Similar to several previous studies (Zhang et al., 1995, 2003), game promotion positively affects the consumption of professional sporting events. Lee et al. (2004) found that festival attendee

satisfaction levels were influenced by different motivation clusters. Funk (2008) also suggested that marketing mix allowed sport consumers to facilitate the negotiation process as part of decision-making. The current findings offer further insights into when motivation is most likely to influence negotiation. In other words, the perception of satisfaction with marketing strategy moderates the motivation-negotiation relationship, such that motivation is a vital predictor for those highly satisfied with marketing strategies. In turn, this may suggest that those who are only slightly satisfied with marketing strategies are not necessarily encouraged to use negotiation strategies to attend. This is consistent with Chen (2012) who found that insufficient marketing efforts significantly deterred people from attending CPBL games. Thus, team marketers and team managers should not only identify the possible reasons causing low satisfaction with marketing strategies, but also consider diverse strategies to ensure that repeat spectators remain highly satisfied with their marketing strategies. For example, the CPLB spectators are mainly motivated by “interest” (interest in sport, escape and excitement) ( $M = 4.23$ ) and “fan” (interest in players, vicarious achievement) ( $M = 4.03$ ), and frequently use “changing interpersonal relations” ( $M = 3.42$ ) as negotiation strategies. Most spectators attended games with friends and family members, fewer with classmates and colleagues, and the least were alone. Based on this, team marketers have the knowledge that their spectators are internally motivated and socially bonded. As Melnick (1993) noted, sport events provide social opportunities for group members (i.e., family members, friends, and organizational members) to come together and be entertained, enrich their social lives through casual socialization, and experience quasi-intimate relationships. To add entertainment value to spectator sports, discounted group ticket campaigns should always be initiated by professional sport teams. Besides focusing on major segments based on current marketing strategies, future marketing may seek ways to attract smaller segments as potential

customers, and those who are only slightly satisfied with the marketing strategies.

Interestingly, compared with Chen (2012) who found intrapersonal (e.g. lack of interest, poor games and players, and lack of knowledge) and structural (insufficient marketing efforts and accessibility to the stadium) constraints among non-attendees, the current study found that attendees had low constraints levels and frequently used changed interpersonal relations as negotiation strategies. As noted by Daniels, Drogin Rodgers, and Wiggins (2005), a structural constraint was frequently negotiated through interpersonal or intrapersonal strategies. Taken together, constraints (intrapersonal and structural) may be possible deterrents to people attending the games. However, these are possibly negotiated through interpersonal strategies and, to some extent, encouraged by marketing programmes. This understanding of consumer decision-making mechanisms, based on the leisure constraint negotiation model, may help team marketers to precisely map efficient marketing strategies.

### **PRACTICAL IMPLICATIONS AND LIMITATIONS**

The CPBL spectators are mainly internally motivated and socially bonded, where marketing strategies can significantly and positively affect this relationship. Based on our findings, there are several practical implications for professional sports marketers in order to improve leisure consumption experiences among spectators. Firstly, attendees watch baseball with friends and family members, experience fewer constraints, and are motivated by personal interest due to their interest in baseball, the excitement surrounding the games, relieving stress, favourite players and team, and personal sense of achievement. Possible marketing strategies include offering special zones for group customers with ticket discounts and ancillary services (e.g. refilling beverage, taking picture with players, etc.). In addition, team marketers should specifically develop social entertainment opportunities and stimulate interactions among

attendees (e.g. BBQs, getting selected spectators involved in half-time activities for prizes, etc.). Team and player performance is one of the motives for attendees who seek vicarious achievement. Home team performance can positively impact on behavioural intentions among professional sport event consumers (Byon, Zhang, & Baker, 2013; Zhang et al., 2003; Zhang et al., 1995; Zhang et al., 1997). Promotional activities associated with players performing well and team performance should be considered. For example, team performance related to current league standing, winning percentage, and historical achievements can be presented and highlighted in-game and in stadium decorations. Additionally, publicizing player performance related to record-breaking, volunteering, and charity campaigns by star players may help attract spectators. Finally, with an increasing population using mobile electronic devices (e.g. smart phones), interactive marketing strategies are favourable options. For example, a fully accessible Internet environment with free Wi-Fi and specific applications (apps) should be provided to improve watching experiences and service quality, as well as to add entertainment value. Thus, attendees can share pictures and comments instantly within a virtual community, which may increase interaction between attendees and non-attendees. The app could be used to instantly target those who need food and beverage services during the games, but are inconvenienced (e.g. the disabled, families with children, outfield, etc.) to increase product sales and meet instant needs. These are some options to enrich spectators' leisure time.

This study has some limitations which provide avenues for future research. Firstly, as indicated in this work, the convergent validity of collective concepts relating to negotiation (this research; White, 2008), constraint (Son et al., 2008; Wilhelm Stanis et al., 2009), and motivation (Wilhelm Stanis et al., 2009) is inadequate in the related research. Further studies should examine the roles of their second-order constructs using rigorous methods (Jöreskog & Sörbom,

1992) to better understand their nature within different contexts. Secondly, the constraints-effects-mitigation model was also modified by introducing the negotiation-efficacy construct (Loucks-Atkinson & Mannell, 2007; White, 2008). Its antecedent role within the model had been assigned. However, based on White's (2008) argument that "the greater people's confidence in the successful use of negotiation resources to cope with constraints, the greater the motivation, the greater the effort to negotiate, the lesser the perception of constraints, and the higher the level of participation", this study suggests that future research should investigate how it moderates both relationships between motivation and negotiation, and constraint and negotiation. Other social cognitive variables, such as social support and self-identity, may also play similar roles. Thirdly, this research was based on a spectator activity in the context of an Eastern culture, compared with most studies targeting participatory activities and conducted in the United States. Even so, future research is encouraged to test the model by examining cross-cultural samples to overcome the difficulties of comparing models resulting from different samples and measures used across different studies. Finally, the study's Taiwan context limits the ability to generalize to other baseball attendees (e.g. the Korea Baseball Organization, Nippon Professional Baseball, and Major League Baseball).

## CONCLUSIONS

The current study extends the leisure constraints literature of Hubbard and Mannell (2001) to professional sport event attendees. The findings partly support the constraints-effects-mitigation model in which negotiation partially mediates the motivation-participation relationship. However, no evidence was found for a constraint-negotiation-participation process. This study further found that the motivation-negotiation relationship is moderated by spectators' satisfaction with marketing strategies, which assists the generalizability of the model and

understanding of market segments. This could help professional sport teams develop marketing strategies which can attract more attendees, in turn enriching spectators' consumption of leisure experiences.

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**Table 1.**

Demographic profiles (n = 997)

<b>Gender</b>		
Male	660	66.2
Female	337	33.8
<b>Age group</b>		
Below 20 years	179	18.0
20-29 years	435	43.6
30-39 years	260	26.1
40-49 years	60	6.0
50-59 years	55	5.5
60 years and above	8	0.8
<b>Occupation</b>		
Shopkeeper	51	5.1
Students	379	38.0
Employed	403	40.4
Housekeeper	56	5.6
Unemployment	37	3.7
Retired	6	0.6
Others	65	6.5
<b>Marital status</b>		
Married	241	24.2
Single (single, divorced & widowed)	756	75.8
<b>Educational level</b>		
Junior high or below	32	3.2
Senior high school	80	8.0
Vocational school	159	15.9
College/university	594	59.6
Graduate and above	132	13.2
<b>Monthly income</b>		
Below 30,000 NTD	478	47.9
30,001-50,000 NTD	262	26.3
50,001-60,000 NTD	95	9.5
60,001-80,000 NTD	128	12.8
80,001 and above NTD	34	3.4
<b>Teams' supporters</b>		
Brothers Elephant	286	28.7
EDA Rhinos	192	19.3
Uni-President 7-Eleven Lions	230	23.1
Lamigo Monkeys	191	19.2
<b>Who they attended the games with (Multiple selections)</b>		
Friends	265	26.6
Families	105	10.5
Classmates	99	9.9
Individually	74	7.4
Colleagues		

**Table 2.****CFA results of the measurement model**

Constructs	SFL	M.	S.D.	t-value
<b>Event Motivation (<math>\alpha = 0.87</math>)</b>				
Interest	0.84	4.23	0.67	31.06*
Fan	0.88	4.03	0.73	33.21*
Baseball & Entertainment	0.78	3.70	0.71	27.66*
<b>Event Constraints (<math>\alpha = 0.79</math>)</b>				
Intrapersonal: lack of interest	0.71	1.90	0.97	22.60*
Interpersonal	0.92	2.19	0.93	29.91*
Structural	0.62	2.72	0.89	19.75*
<b>Event Negotiation (<math>\alpha = .67</math>)</b>				
Changing interpersonal relations	0.46	3.42	0.87	13.12*
Improving finances	0.61	3.02	1.07	17.12*
Time management	0.86	3.39	1.00	22.60*
<b>Event Participation (<math>\alpha = .89</math>)</b>				
The duration you have been supporting the team	0.84	3.27	1.31	22.59*
The frequency you attended CPBL games last year	0.96	3.28	1.27	24.77*
<b>Satisfaction of marketing strategies (<math>\alpha = .86</math>)</b>				
The variety of peripheral commodities (e.g., t-shirts, team uniform, accessories, mementos, etc.)	0.77	3.65	0.87	23.97*
Ticket price and product price	0.60	3.47	0.87	18.49*
The convenience of ticket and product purchasing	0.69	3.76	0.83	22.23*
TV broadcasting, supporters club, summer camp, official website, advertising	0.76	3.56	0.85	33.03*
Charity activities, press conferences, campus activities, media reports	0.74	3.52	0.86	31.88*

Note: SFL = Standardized Factor Loading; \* $p < .05$

All items were measured on 5-point scales. Event Motivation (1 = strongly disagree, 5 = strongly agree); Event Constraints (1 = never, 5 = very often); Event Negotiation (1 = never, 5 = very often); Event Participation (duration: 1 = seldom support (0~5 years), 2 = somewhat support (6~10 years), 3 = support (11~15 years), 4 = highly support (16~20 years), and 5 = extremely support (21~26 years), frequency: 1 = never (0 time), 2 = seldom (1~2 times), 3 = sometimes (3~5 times), 4 = often (6~10 times), and 5 = very often (11 times and above)) Satisfaction with Marketing Strategies (1 = very dissatisfied, 5 = very satisfied).

**Table 3.****Descriptive statistics and validities of constructs**

	EM	EC	EN	EP	SMS
EM	<b>0.84</b>				
EC	-0.25	<b>0.76</b>			
EN	0.37	-0.14	<b>0.66</b>		
EP	0.23	-0.13	0.33	<b>0.90</b>	
SMS	0.42	-0.15	0.23	0.13	<b>0.71</b>
Mean	3.99	2.27	3.28	3.28	3.59
CR	0.87	0.80	0.70	0.90	0.84
AVE	0.70	0.58	0.44	0.81	0.51

*Note:* EM= Event Motivation, EC= Event Constraint, EN= Event Negotiation, EP= Event Participation, SMS= Satisfaction of Marketing Strategy; Fit indices:  $\chi^2 = 366.5$  ( $p = .000$ ), d.f. = 92,  $\chi^2/d.f. = 3.98$ , RMSEA = 0.05, NFI = 0.96, CFI = 0.97, IFI = 0.97, GFI = 0.96. The diagonal scores stand for the square root of the AVE for individual constructs.

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**Table 4****Results of hypothesis tests**

Hypotheses	Coefficient
H1 Event Constraint → Event Participation	-0.07
H2 Event Constraint → Event Negotiation	-0.09
H3 Event Negotiation → Event Participation	0.28*
H4 Event Motivation → Event Participation	0.11*
H5 Event Motivation → Event Negotiation	0.34*

Note: \* $p < .05$

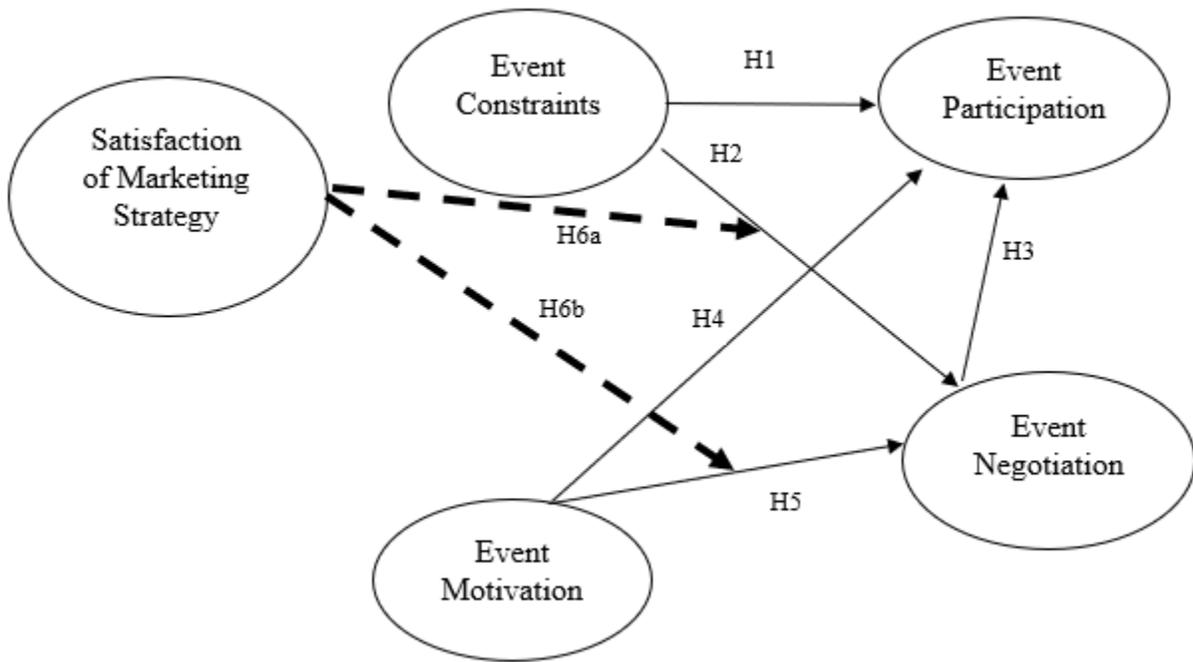
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**Table 5.****Estimated results of the moderated model (satisfaction with marketing strategies)**

Predictors	Step 1		Step 2		Step 3	
	$\beta$	t	$\beta$	t	$\beta$	t
Gender	.06	1.78	.02	.72	.02	.73
EM			.30	9.66**	.17	3.48**
SMS			.09	3.00**	.11	3.49**
EM $\times$ SMS					.16	3.26**
F-value	3.17		41.42**		34.01**	
R <sup>2</sup>	.00		.11		.12	
$\Delta R^2$			.11		.01	

Note: EM= Event Motivation, SMS= Satisfaction of Marketing Strategy; \* $p < .05$ ; \*\* $p < .01$

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**Figure 1.** The Proposed Conceptual Model of Event Motivation (EMO), Event Constraints (EC), Event Negotiation (EN), Event Participation (EP), and Satisfaction of Marketing Strategies (SMS)

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