

What makes fans attend professional sporting events? A review.

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Abstract

Despite their growth and magnitude, several professional sport leagues have been concerned over time with the problem of decrease in the general interest surrounding their product, which has resulted in a fewer number of fans attending the league's games. By focusing its efforts on retaining the fans that already attend games, leagues are ignoring some very important segments of the population consisting of people who, for various reasons, do not attend games, or attend only very infrequently. It is very important for professional leagues to identify these segments and investigate the various reasons that people have for not attending basketball games. These market segments are quite considerable in size and represent a big opportunity for growth through the expansion of the current fan base. Therefore, to attract spectators, it is necessary to identify the factors that influence spectator decision-making to attend games. The purpose of this study is to provide an overview of such variables through an exhaustive review of studies focusing on attendance at professional sporting events.

Keywords: Attendance, Professional Sporting Events

Introduction

Variation in attendance figures represents a major concern for professional sports and leagues. Spectators are very important for the league as they buy the tickets for the games and tickets are a major income producer for any professional league. Noll (1991) reports the importance that ticket sales have for National Basketball Association (NBA) teams. Very few studies deal with the problem of non-attendance at professional sport events. Even those studies which attempted to investigate the problem, did it with data collected from attending individuals, during sporting events. Douvis (2007) is one of the few researchers who examined the problem of non-attendance at professional basketball games, using data collected from people who did not attend Greek league games. This study enabled market researchers to classify the league's fans in three different non-attendance groups, by examining the way the subjects responded in variables included in the "Basketball Spectator Non-Attendance Scale", specifically developed for the study. Zhang et al. (1998) stressed the importance for inclusion of the non-attending population in future research on spectator game attendance. Literature on non-attendance is scant. For that reason the study of attendance variables is also very important, as it is the next most relevant subject that can be found in the literature. The theoretical import of such variables is valuable in order to enhance the existing theoretical understanding of the factors associated with non-attendance.

Attendance studies

Schofield (1983) distinguished between production function studies and demand studies. The former focus on the influence of individual player skills or team performance on attendance. The latter examine the demand for sport entertainment, as measured by several attendance factors, focusing on the reasons fans attend games. Only a few studies have examined spectator attendance at professional basketball games (Noll, 1974, 1991; Zak et al., 1979; Whitney, 1988; Hansen & Gauthier, 1989; Zhang et al., 1995), focusing mainly on the relation between attendance and team performance.

Sociodemographic and psychological variables play a major role in the formulation of spectator attendance strategies (Dimanche and Samdahl, 1994).

A review of literature on spectator attendance studies from other sports reveals several categories of other attendance-related variables that are ignored in most basketball studies. Most of the research has focused on Major League Baseball (Baade & Tiehen, 1990; Becker & Suls, 1983; Siegfried & Hinshaw, 1977), football (Doyle, Lewis & Malmisur, 1980), hockey (Jones, 1984, 1969), soccer (Bird, 1982; Hart, Hutton & Sharot, 1975), golf (Gauthier & Hansen, 1993; Godbey & Robinson, 1979; Hansen & Gauthier, 1993) bicycling, tennis and skiing (Godbey & Robinson, 1979). These studies reflect a marketing perspective and examine spectator attendance variables. Factors associated with non-attendance are generally ignored.

The literature indicated a number of studies investigating the variables which may influence fan attendance at various sporting events. Marcum and Greenstein (1985) reviewed this literature and found that attendance variables fall into three categories: Socio-demographic characteristics, including population composition, social status, economic conditions, competing activities (Demmert, 1973; Noll, 1974), accessibility of the event, including number of seats, location, transportation, weather, day of the week (Jones, 1969; Siegfried & Hinshaw, 1977), and performance, including team quality, position in the league and star players (Davenport, 1969; Scully, 1974). More recently, variables influencing spectator decision making on attending sporting events have been grouped by researchers (Greenstein & Marcum, 1981; Hart et al., 1975; Schofield, 1983) into the following four categories: (a) game attractiveness (e.g., individual skills, team records, league standing, record breaking performance, closeness of competition, special events and entertainment), (b) economics (e.g., ticket price, promotions, income, substitute forms of entertainment, television effect and competition of other sport events), (c) sociodemographics (e.g., population, age, gender, ethnicity, occupation, education and geography), and (d) audience preference (e.g., schedule, convenience, accommodation, weather, stadium quality and team history in a community).

Several studies examined game attractiveness variables such as the presence of star players on the teams (Fillingham, 1977; Hill et al., 1982; Jones, 1984; Medoff, 1976; Noll 1974; Scully, 1974), whether the team was a contender

during the season or a contender for participation in the play-offs (Bird, 1982; Demmert, 1973; Drever & MacDonald, 1981; Hart et al., 1975; Hill et al., 1982; Siegfried and Eisenberg, 1980) and impact of game day promotions (Hill et al., 1982; Jones, 1984; Siegfried & Eisenberg, 1980). The above studies indicated that all of these variables were significant predictors of spectator game attendance and also that each of these variables was positively related to attendance. Becker (1983) found a positive relationship between successful past performance and attendance, as opposed to a good or a bad streak.

With respect to economic variables, various authors have examined the availability of other forms of entertainment (Demmert, 1973; Hart et al., 1975; Noll, 1974), ticket price (Bird, 1983; Demmert, 1973; Fillingham, 1977; Noll, 1974; Siegfried & Eisenberg, 1980), the impact of sports television coverage (Demmert, 1973; Drever & McDonald, 1981; Hill et al., 1982), the impact of alternative sport attractions in the same market (Demmert, 1973; Fillingham, 1977; Hart et al., 1975; Medoff, 1976; Noll 1974) and per capita income (Bird, 1982; Hart et al., 1975; Noll, 1974). The existence of alternative forms of entertainment, the availability of multiple sport attractions and increases in the price of tickets were found to be negatively related with spectator game attendance. Ticket price and television coverage were both found to have a negative effect on attendance. In terms of the remaining variables, per capita income and higher income were found to be positively related with game attendance.

In terms of socio-demographic variables, the size of the market (Fillingham, 1977; Hart et al., 1975; Medoff, 1976; Noll, 1974; Siegfried & Eisenberg, 1980) was found to be positively related to attendance. Studies dealing with the ethnicity of a market (Fillingham, 1977; Medoff, 1976; Noll, 1974; Scully, 1974; Siegfried & Eisenberg, 1980) indicated that greater numbers and sizes of certain ethnic groups in a population may have negative effects on attendance. Other studies examined geographic parameters in relation to attendance, including proximity of other franchises, ease of access to sports facilities and type of climate (e.g., whether it was favorable to the type of sport being played). Their findings revealed no statistically significant relations with regard to the impact of a favorable climate or ease of access to

the facility. There were however indications that the proximity of other franchises may have a negative effect on attendance figures (Siegfried & Eisenberg, 1980).

Other researchers have investigated variables that dealt with scheduling, impact of a new stadium, weather conditions, and whether spectators attended alone or not. In terms of scheduling, these studies found decreases in attendance figures when games were scheduled during the afternoon. Attendance increased when games were scheduled later in the evening, on weekends and at the end of a season (Drever & McDonald, 1981; Fillingham, 1977; Hill et al., 1982; Siegfried & Eisenberg, 1980). Building a new facility was found to be positively related to game attendance (Demmert, 1973; Greenstein & Marcum, 1981). Schaaf (1995) reports that in the case of major league baseball, where a number of new facilities have been built in the recent years, attendance has increased eighteen to forty-five percent. With respect to weather conditions and nature of the sport, it was found that they may have some impact on game attendance. Exceptionally good weather may have both positive or negative effects depending on the sport and the availability of alternative leisure activities (Bird, 1982; Drever & MacDonald, 1981; Noll, 1974; Siegfried & Eisenberg, 1980). Hocking (1982) investigated the effect that friendship had on spectator game attendance. He found that people tend to attend more when they are with a friend even if they are not frequent attenders themselves.

In summary research shows that game attractiveness and audience preference are positively related to game attendance (Baade & Tiehen, 1990; Hansen & Gauthier, 1989; Jones, 1984, Doyle, Marcum & Greenstein, 1985; 1991; Wall & Myers, 1989; Whitney, 1988; Zech, 1981). Among economic variables, promotion and income have consistently been found to be positively related to game attendance, while ticket price, substitute forms of entertainment, television effect and competition from other sport events have been found to be negatively related to game attendance (Baade & Tiehen, 1990; Bird, 1982; Demmert, 1973; Hansen & Gauthier, 1989; Hart et al., 1975; Hill et al., 1982; Noll, 1974; Siegfried & Eisenberg, 1980). In terms of sociodemographics, community size is positively related to game attendance and mainly young to

middle aged white males attend professional sport events. Few studies have examined the effects of educational and occupational background on game attendance (Greenstein & Marcum, 1981; Hart et al., 1975; Hill et al., 1982; Noll, 1974; Scully, 1974; Siegfried & Eisenberg, 1980; Whitney, 1988).

The review of literature suggests that not all fans are motivated to attend by the same factors. Borland (1987) and Lye (1992), for example, distinguished between hard core sports fans and theatre-goers who attend infrequently. Different marketing strategies might be needed in order to attract and retain each subset of spectators. Club managers often claim that the only way to increase attendance and guarantee a full stadium is to have a successful playing record. Waddell (1992) in an article about NBA attendance disagrees, saying that “many teams with mediocre on court showings did surprisingly well (in terms of attendance)... almost singularly due to strong and creative marketing efforts”. Greenstein and Marcum (1981) found that only 25% of the variance in attendance was due to performance.

Zhang et al. (1996) examined the extent to which spectator knowledge of hockey affects game attendance. The relationship of socio-demographics and hockey knowledge was also evaluated. Spectators from three second-half season home games of an international hockey league team responded to a questionnaire that included spectator background information and a hockey knowledge quiz of 10 items. The results indicated that hockey knowledge scores were positive predictors of game attendance and ticket consumption level. The results also revealed that spectator knowledge of hockey is affected by several socio-demographic variables such as age, sex race, income, education, and marital status. The findings support improvement of spectator knowledge as a major marketing objective for a professional hockey team. The authors suggest that promotion strategies should take into consideration the socio-demographic backgrounds of spectators. This study was limited to spectators attending games of a minor league professional hockey team in the southern part of the United States. Although there are many similarities between a major and a minor league team, and between a team in the north and in the south, differences may exist as well. The findings of the study can only be generalized to teams of similar competition level and region. It should

also be noted that in this study, hockey knowledge accounted for only ten percent of the total variance in game attendance. The remaining ninety percent contains factors which were not investigated in the study.

It is generally believed that winning games translates into increased attendance figures. This assumption is proven to be true in major league sports (Demmert, 1973; Hansen & Gauthier, 1989; Hunt & Lewis, 1976; Jones, 1984; Medoff, 1976; Noll, 1974; Quirk & Hodiri, 1974; Schofield, 1983; Scully, 1974; Whitney, 1988; Zhang, et al., 1995). Because of the multidimensional nature of attendance as a function of demand and production variables (Schofield, 1983), except from the winning percentage, market size is also perceived to be an important attendance predictor. Bravold et al. (1997) investigated the effects of winning percentage and market size on attendance in minor league baseball. Two basic questions were posed by the authors. Did attendance correlate with winning percentage across competitive levels? How much variance could be accounted for by winning percentage and market size in predicting attendance? Results indicated that population was an effective predictor for attendance at Rookie League and class A levels, whereas winning percentage was significant in predicting attendance at Class A and AA levels. No population or winning percentage effects were found at the Class AAA level. As competition level and market size increase to the highest and largest, respectively, neither winning percentage nor market size can be used as reliable predictors in determining game attendance. The authors suggested that their findings can be used to locate franchises in the right markets and to link these franchises with the most appropriate marketing strategies. At the levels of Rookie league and Class A, where market size of the host city is the important factor in determining attendance, a team should be relocated in a city with a large population, but fewer competing entertainment options. At the Class AA level, where winning percentage is the significant factor in attracting spectators, a team's performance variables such as winning records, and affiliations should be emphasized in promotion, in addition to treating the games as events. At the Class AAA level, where none of the two previous factors is a sufficient predictor of attendance, career sport marketers and comprehensive marketing strategies are needed in promoting attendance.

Several researchers have suggested that alternative leisure activities compete for the entertainment dollar, yet no actual testing was conducted (Bird, 1982; Demmert, 1973; Hart et al., 1975). The main focus of these studies was on Baseball and Soccer. The results showed that the existence of competitors would reduce attendance at professional sports events. However, the actual competitors were not recognized. Stolar (1989) stressed the importance of competitor identification, indicating that without identifying competitors, one can not select marketing strategies that maximize its competence and market potentials. Zhang et al. (1997), by identifying market competitors of a minor league professional hockey team tested the hypothesis that substitute forms of entertainment and other sport attractions would negatively affect attendance at a sport event. By interviewing the team administrators, and through a review of literature, the authors identified 15 possible entertainment options in the greater metropolitan area. The Scale for Entertainment Choice, which was created specifically for the study, was used. Spectators from six second-half season home games of the hockey team participated in the study. The results revealed that the primary competitors for a minor league team came from the major league sports, movies, recreational participation and TV. Another interesting finding was the fact that concerts positively affected game attendance. The authors suggested several marketing strategies, along with a research model for other professional teams. The proposed actions that marketers should take were the following: (i) To identify competitors via consumer survey, appropriate data analysis and a management information system. (ii) To study competitors, determine their strengths and weaknesses and develop a strategy to reduce their impact. (iii) To maintain a competitive edge with other sports by creating and promoting the uniqueness of the product (e.g., price, style of play). (iv) To include game drama, promotional themes, and artistic elements in game presentation. (v) To recognize and target special groups, like the concert-goers. (vi) To advocate and reinforce a fitness-type mission and to avoid scheduling events during TV programs appealing to the market core. All these marketing decisions may also apply to other teams facing similar challenges.

Kalevi (1984), investigated the effects of introducing foreign professional players in the Finnish Basketball League. To determine the attitudes toward foreign professionals in various Finnish leagues, all clubs participating in the

three highest divisions were surveyed by mailed questionnaire. The results indicated that recruitment of foreign professional players affected negatively the team spirit and play tactics, the economics of the club, the development of other sport branches in the club and the success of the national team. Positive effects were expected on the spectator attendance figures, public relations of the club and the success of the team. The negative attitudes towards foreign players could be explained by the tight financial situation of the league, which was unable to afford the expensive contracts of the professional players. Conversely, perhaps, the leaders of the clubs were to some degree suspicious and eager to preserve the amateur nature of the league against external pressures of professionalization. Despite the generally dismissive attitudes of Finnish basketball clubs towards the use of foreign professional players in the country's basketball leagues, it seems that the management of the clubs perceived it positively in terms of increasing attendance figures. Something that needs to be noted is the fact that basketball tradition and popularity in Finland are minimal. Thus the generalizability of the findings is limited only to similar small leagues.

Burdekin (1991) examined the importance of customer-based discrimination in professional basketball over the 1980-81 to 1985-86 seasons. The study provides strong support for considering the importance of consumer preferences in shaping the racial composition of NBA teams. Empirical results offer strong support for the hypothesis that, if fans prefer to see players of their own race, teams will be influenced in their selection of players by the racial composition of their market area. By the same token, attendance at NBA games was found to be positively related to the extent to which the racial composition of the team matches that of the corresponding market area. Markmann (1976) found a very high correlation coefficient between the playing time by whites and the percentage of the population that is non-black (for the 1972-73 NBA season). This suggests that management does not trade or draft players randomly by race, but instead takes into account the racial composition of its team's followers as this appears to have a significant effect on attendance. Several other studies which dealt with the effects of the racial composition of the team on spectator attendance had similar results (Karabel & Karen, 1982; Koch & Vander Hill, 1988; Brown et al., 1989).

Zhang (1995) assessed variables that affect the spectator decision to attend NBA games, by developing and using the Spectator Decision-Making Inventory. For the creation of the instrument 20 decision-making variables were identified. The content validity of the instrument was assured by the participation in the procedure of five experts. From a random sample of NBA spectators that were surveyed, factor and regression analyses showed that the measurement qualities of the instrument were valid. Its final version included 14 items under four factors. Game promotion, home team, opposing team, and schedule convenience. All four factors were found to significantly predict spectator game attendance. The relationship between these factors, game attendance frequencies and socio-demographic variables was also examined. The results showed that game promotion, home team and the opposing team were positively related to the number of games fans attend in the current season. The schedule convenience was positively related to the number of games attended in the previous season and the home team was positively related to the number of seasons fans attended home games. There were no differences among the factors and different types of ticket holders, nor among spectators with different future ticket purchase interests. Game promotion, the opposing team, and the schedule convenience were negatively related to age, whereas, the game promotion and schedule convenience, were negatively related to economic status. The four factors were different in terms of ethnicity, education level and occupation of the spectators.

Bergier (1978) attempted to provide a deeper understanding of the factors affecting leisure related choices among American adults. For the purposes of this study spectator sports were examined. Bergier's study involved the investigation of the following three research questions: Along which dimensions do consumers evaluate spectator sports? What is the relative importance given to these dimensions? Can clusters of respondents who exhibit similar viewing patterns with respect to spectator sports be identified? The results revealed the existence of four perceptual constructs on which individuals evaluate and compare different spectator sports. These included the human element of the game, the nature of the game, the speed of the game and the indoor/outdoor dimension of the game. The significance of these constructs was found to be of equal importance to the respondents of the study.

The study examined a broad area of eleven spectator sports, which allowed for certain sports like auto racing to be included.

In terms of market segment identification three market segments were identified using cluster analysis. These three segments were derived from the similarity of the respondents' multivariate profiles with respect to attendance at the eleven spectator sports under investigation. Discriminant analysis was used to profile the segments. Several consumer characteristics were found to discriminate significantly among the different segments. The discriminating variables included preferences for leisure activities, preferences for specific sports, participation in sport activities, psychographics and to an extent demographic variables. Of the three segments, the first one had the lowest preference for spectator sports. This group consisted of more family oriented and home based people in their leisure pursuits. The second segment had a higher frequency of viewing spectator sports on television and live than segment one. The second segment also included the highest number of sports participants among the three groups. The third segment is described as the young male segment. The members of this group were the most social and sports oriented. Consumers in this segment also had a tendency to follow contact sports, such as ice hockey, boxing and football; more closely than the other two groups. A major delimitation of the study is the fact that the sample consisted of subscribers to the Sports Illustrated magazine. Knowing that Sports Illustrated subscribers are more avid in their sports following behaviors, it would be rather difficult to conclude that these data may apply to the general population of sports consumers.

Zhang and Smith (1997) examined the influence of TV and radio broadcasting on attendance at NBA games from four different perspectives: choosing between attending a home game and watching the game on TV, watching away games on TV, using cable TV channels, and listening to games on the radio. Spectators from six second half 1993-94 season home games of a major Western Conference NBA team responded to a survey conducted in the arena prior to each game. The results revealed that TV broadcasting of home games would decrease attendance, TV broadcasting of away games would increase attendance, cable TV access would not affect attendance and radio broadcasting of games would increase attendance. The first finding is

consistent with previous research findings that broadcast of home games negatively affects attendance. The fact that spectators who viewed more away games on TV attended more home games, could be explained by the additional information provided to them and the increase of their interest for the team's games, which was achieved through broadcasting (Coakley, 1990; Greendorfer, 1981; Lever & Wheeler, 1984). The authors concluded that NBA teams should continue to sell broadcasting rights to cable TV companies and radio stations as the first represents a source of additional financial gain and the second may also promote interest in the game.

Zhang et al. (1998), in a more recent study, assessed the relationship between broadcasting and attendance at minor league hockey games in terms of five media forms: cable television broadcasting, commercial television broadcasting, radio broadcasting, broadcasters and overall broadcasting media. The data collection involved a survey on attendance level and media use, conducted in the arena during the intermissions of games from six second half 1994-95 season home games of an International Hockey League team. The results indicated that viewing the home games on cable television and away games on commercial television, listening to games on radio and the quality of television and cable broadcasters were all positively associated with attendance. These factors accounted for almost eleven percent of the explained game attendance variance. These findings led the authors to conclude that the current broadcasting agreement is positively related to game attendance, as it provides information and increases the interest of the spectators for minor league hockey games. It should be noted that both these studies, which dealt with the effect of broadcasting on attendance at professional sports, explained only a small part of the total variance in game attendance (six and eleven percent respectively). The rest of the variance was linked to factors not included in these studies. Interestingly both these studies stressed the importance of including non-attending populations in future research.

In general, loyal fans and a winning team are perceived as having a positive effect on game attendance. However, team administrators are beginning to realize the significance that marketing the total stadium experience has for their organizations. Wakefield and Sloan (1996), using data collected from

spectators at five Southeastern Conference football stadiums, investigated the effects of team loyalty, stadium parking, stadium cleanliness, perceived crowding, food service, and fan behavior control on the spectator's desire to attend games at the stadium. The results reinforced the hypothesized relationships, that although team loyalty has a strong influence on attendance, stadium design and services are also of great importance in increasing the spectators' desire to attend games. Such findings are very important for sports administrators, in making them value the importance of sportscape as a tool to maintain customer satisfaction and increase attendance. Teams that have not reached maximum levels in their attendance figures may find that investing on things they can control (stadium facility, marketing strategy) rather than on things they cannot control (market size of competitors, other team's performance) may yield significant benefits for these organizations and their fans (Wakefield and Sloan, 1996). In conclusion, the authors stressed the importance that team loyalty has on game attendance, and suggested several team loyalty building strategies. Promotions that develop and reinforce spectators' involvement and interest, making team members more accessible to spectators through public service and promotional appearances, and targeting younger spectators and their families with discounted tickets to encourage trial and repeat purchases, are some of the suggested strategies.

Mawson and Coan (1994) studied the marketing techniques used by NBA franchises to promote home game attendance. Marketing directors of twenty-two National Basketball Association franchises responded to the Marketing Technique Questionnaire, which contained twenty-two statements pertaining to marketing techniques used to promote attendance at home games. The priority of the techniques used was determined by ranking the means from a 5-point Likert response scale. The NBA franchises were divided for the analysis into high and low attendance, based on seasonal percent capacity attendance. T-tests revealed significant differences between the high and low-attendance groups for each item. The results revealed that the "option of purchasing season tickets" and "obtaining business sponsorships", were considered to be the priority marketing techniques by all NBA franchises. Marketing directors of high attendance franchise teams used a "winning season" as an attendance

incentive. Directors of low attendance franchise teams used “a strategic planning process”, “direct mail advertising” and “newspaper advertising” as added priority techniques. Additionally, marketing directors of franchises with low attendance differed significantly from high attendance directors in that low attendance marketers used “strategic planning” and “newspaper advertising” more often. It seems normal that marketing directors of winning franchises would exploit the success of their teams. On the other hand, for marketers of teams experiencing low attendance, when an effort must be made to fill seats, a strategic planning approach is a proven method of obtaining business results. Finally, newspaper advertising is preferred by marketers of low attendance teams, because information about games can be distributed locally in a timely manner and also can be utilized to emphasize games as ticket availability demands.

Madura (1981) studied the 1977 season and measured the influence of specific variables on game attendance for the six major league baseball teams in the Sunbelt conference. The author indicated that some specific factors, if modified, could increase fan interest and therefore attendance. Some of these attendance affecting variables are not under the control of league officials or team owners, while other variables are more controllable. All 1977 home games of the Sunbelt teams were analyzed, and a regression model was used to analyze the influence of each variable on attendance. Among the uncontrollable factors, the current record of the home team was the most significant determinant of attendance, followed by the current record of the visiting team. Although several other variables played roles in explaining the variations in game by game attendance, the current win-loss record of both teams was the most important attendance predictor.

With respect to controllable variables, the results indicated that scheduling of games, and use of promotional activities were found to be the most important determinants in attendance variation. Doubleheaders, late season and weekend games were found to be associated with an increase in attendance figures, while differences between night and day games did not seem to affect attendance. The author, therefore suggested that the owners of the teams should use promotional activities more often, as the estimated benefit of such

activities by far surpasses the costs. Finally, it was suggested that teams should start selling broadcasting rights to local television stations. Although locally televised games do not add to attendance, they do not reduce it and they do increase dramatically the revenue of the teams through the sale of broadcasting rights.

Richard and Allaway (1993) investigated the influence of several covariates on home game attendance, using a discrete-time hazard model. This model has the ability of predicting whether an individual will attend and, if so, when in terms of specific games. The results indicated that attendance is a function of the influence of friends, convenience of the day/time of the game, perception of the importance of the opponent, and ability to obtain a parking space. These findings should assist marketers when attempting to attract new fans. Several managerial implications, were also discussed by the authors. The technique used in the study offers considerable forecasting potential for the manager of a team. By examining the hazard plots, a manager can see that the attendance of one's first home game appears to occur early in the season. Once several games pass without attendance, it is less likely for the prospective spectator to attend later in the season for the first time. This has important implications in terms of promotional allocation. Teams may wish to promote the games to attract fans early in the season since the likelihood of attending one's first game declines over time. It is also suggested that the model can be used to assess peaks in the hazard plots to determine games in which previous non-attending individuals have a higher probability of attending. This should help managers in their planning (concessions, event staff) and in their ability to meet increased demand more effectively (Richard & Allaway, 1993).

Wall and Myers (1989) examined the relative importance of factors influencing spectator attendance at Toronto Blue Jay games, taking place at the Exhibition Stadium, in the 1984 and 1985 seasons. The authors investigated the effects of several factors including weather (temperature, wind speed, precipitation), attributes of the game (day of the week, weekday or weekend, month, game number, start time, and season in which the game is played), economic factors (whether a special promotional event is scheduled, whether the game is televised), and competition variables (winning streak,

losing streak, opposition's division, opposition's position, opposition's winning percentage, Blue Jays' position, Blue Jays' winning percentage, identity of the opposition, and rivalry rank). The findings revealed similar patterns throughout the data when the 1984 and 1985 seasons are viewed together. Type of day, rivalry rank and special events were found to be especially prominent indicators of attendance. All three factors fall under the control of the club and can be manipulated by its associated agencies. Rivalry is a reflection of the competitiveness of teams as portrayed by the media and as perceived by the fans, which in turn is, to a degree, controlled by the team itself through its press releases. Special events are fully controlled by the Toronto Blue Jays organization. The authors underline the importance that has for sports organizations, not only the awareness of those factors which influence attendance, but also the understanding of the degree to which these factors can be controlled and manipulated. The authors suggested that target advertising and careful marketing strategies could improve attendance, even if the team is not winning and other influencing factors are difficult to control.

Greenstein and Marcum (1981) examined the relationship between team performance factors and attendance at baseball games in the National League from 1946 to 1975, using a dataset of 282 cases, employing team season summary statistics as the unit of analysis. The results revealed that team performance accounts for about 25 percent of the variation in season attendance, and that the effects of specific performance measures (represented by linear composites of pitching, offensive and defensive indicators) on attendance are mediated through winning percentage. It was also indicated that while overall attendance increased during the thirty-year period, these increases may be explained as a result of league expansion, construction of larger stadiums, population growth in the metropolitan areas of cities boasting major league franchises and construction of interstate highways which facilitate access to fans. In contrast to increases in overall spectator attendance, the proportion of seats filled had remained relatively constant over the investigation period. The authors argue that the expansion of television had stolen a considerable number of individuals, who might otherwise have attended games in person, thus lowering game attendance (Michener, 1976; Koppett, 1974). In conclusion, it was suggested that despite the fact that the

study explained twenty five percent of the variance in attendance on the basis of performance variables , inclusion of socio-demographic and accessibility factors is very important in increasing the explanatory power of the model.

Marcum and Greenstein (1985) explored game by game attendance data for one National League team (St. Louis Cardinals) and one American League team (Texas Rangers) for the 1983 season. Their purpose was the investigation of factors related to attendance at professional sporting events. Measures of ten factors that could reasonably be expected to affect attendance were gathered: day of the week, type of team promotion, opposing team, opponent's won-lost percentage, opponent's games behind first place, home team's won-lost percentage, home team's games behind first place, home team's record over the previous ten decisions, weather conditions, and whether the opening involved a doubleheader. The results obtained from the performance of multiple regression analyses indicated that the major factors affecting attendance were day of the week, opponent and type of promotion. Nearly all the explained variation in attendance in both datasets can be attributed to these three variables. None of the remaining factors accounted for as much as five percent of the variation. Recent and season long performance measures for both home and visiting teams were found to have a relatively small effect on spectator game attendance. The fact that promotions and opposing team had by far a larger effect on attendance for the Rangers was not unexpected, considering the poor season that the Rangers had. When a team is doing well, attendance will be high regardless of the quality of the opponent or the promotional strategies employed by management (Canes, 1974). When a team is doing poorly, fans need extra incentive to show up. Another interesting finding was the difference in the percentage of explained attendance variation for the two teams. The ten factors explained ninety percent of the variation in Ranger attendance, but less than seventy percent for the Cardinals. The authors indicated that the successful season for the Cardinals is a possible explanation for this difference in explained attendance variation. In general past performance was found to have a small effect on attendance, however the authors suggested that the Cardinals should use this factor in promoting their home game attendance. The long and successful history of St. Louis may

attract fans, based on the memories of past Cardinal championships (Becker & Suls, 1983).

Burkitt and Cameron (1992) performed an econometric analysis of Rugby Football League matches, in England, between 1966-1990, to examine the impact that restructuring of the league had on team attendance. The dramatic declining trend (down by 50% between 1961 and 1971, involving a loss of over a million spectators) led the game's legislator to reorganize its financial base by adopting the radical strategy of dividing member clubs into two divisions, in the hope of coming closer to an optimal revenue maximization strategy. The results indicated that the move from one to two leagues in 1973, had a substantial impact on attendance. Teams in the upper league experienced greater attendance, while those in the lower league had reduced attendance. The fact that restructuring allowed the rich to get richer and the poor to get poorer, is consistent with Cairns's (1987) conclusion in his study of the reorganization of Scottish association football. Overall, it was found that restructuring had a positive effect on total attendance. In terms of individual teams there were fifteen gainers, six losers and nine teams that had no change. The gains of the gainers far exceeded the losses of the losers. This resulted to the application of the economic principle of "compensation", by imposing a 15% levy on first division clubs' attendance revenue to be used for the support of second division clubs. The authors indicated that the average league attendances increased for the 1975-76 season with a minor interruption of the trend between 1985 and 1988. This improvement supports the view that two divisions changed the nature of the product being offered to potential spectators. On the other hand the benefits of restructuring were distributed inequitably in favor of the first division clubs. For that reason the desirability of such an outcome is highly questionable. It is possible that the survival of the 1973 structure until 1991, relied on the inability of its opponents to generate a coalition commanding the necessary two-thirds majority to initiate change.

Siegfried and Eisenberg (1980) examined the various factors that influence attendance at minor league baseball games. They applied the logic of economics to minor league baseball in order to isolate the relevant information. Then they used data supplied by twenty-seven different minor

league teams covering eighty-six separate seasons to statistically evaluate the inferences derived from the economic analysis. It was found that, average ticket prices, number of home dates, percent of the population that is black, longevity of the team, game excitement, quality of play, merchandise and price promotional efforts, were the most influential determinants of attendance. In contrast, per capita income, winning record and advertising were found to have little or no influence on attendance. Overall, the factors included in the study accounted for eighty percent of the variation in season attendance at minor league baseball games, between 1973-1977. As was indicated by the authors, the results of the study were consistent with the established economic doctrine. Attendance declined as prices rose, per capita income had little effect on attendance, but the quality of play and game excitement were important to fans and in fact, more important than winning. The model of the study predicted higher attendance for a minor league team that hits a lot of home runs, yet loses consistently, than for a winning rookie league team. Promotional efforts appeared to be effective in increasing attendance. On the other hand paid advertising seemed to be totally ineffective, probably because of the free advertising that occurs through sports reporting. When information is adequately spread by sports reporting, the role of paid advertising in minor league baseball marketing is significantly reduced.

Scully (1974) and Medoff (1976) found a team's revenues to be positively associated with its winning percentage. Demmert (1973), Noll (1974) and Hunt and Lewis (1976) found that attendance is positively related to recent pennants and negatively related to games-behind-lead. Since the performance variables used by these two groups of researchers have never been combined, it is not clear whether fans attend games on the basis of season championship prospects or game winning prospects or both. Whitney (1988) attempted to resolve this problem by employing regression equations, grouped in two systems of ticket demand equations (game-winning and championship-winning), one each for the National and American Baseball Leagues. The regression results from previous research generally indicated that prospective victories and past and prospective championships had a significant contribution to fan interest in baseball. The regressions in Whitney's (1988) study provided statistically significant support for the proposition that a mix of game winning

and championship winning prospects enhanced fan interest. The author discusses several applications of this finding. First, in terms of franchise expansion, there was a proposal formulated by a committee of team owners, recommending expansion of the baseball league from twenty-six to thirty-two franchises. Since fans like their teams to win both games and championships, the proposed league expansion should produce mixed feelings among fans of existing teams since marginal franchises increase the winning percentages but decrease the chances of already existing teams to win a championship. With respect to the already existing regular season and play-off configuration, basketball and hockey fans occasionally argue that the regular season is meaningless, since such high proportions of teams qualify for play-offs. Championship considerations suggest that this complaint might be a rational one. A shorter regular season will satisfy both groups of fans and increase attendance.

Noll (1974) examined the demand for sports contests. First the author outlined the general approach he followed to select the demand influencing factors used in the study. Then he continued with an analysis of each of the four major team sports (baseball, football, basketball and hockey). It is the basketball portion of his research that has a bearing on the present study. Fraction of games won, percent of black population, number of star players, per capita income, ticket price and NBA membership, were the factors used in the analysis to determine attendance at professional basketball games during the 1969-70 and 1970-71 seasons. Average attendance per game was used, rather than total season attendance, because of the variance among teams in the number of games played at home. The regression results indicated that the model explained almost eighty four percent of the total variance in attendance. The correlation between population and attendance was found to be slightly positive, predicting that 1million residents in a metropolitan area would add about five hundred and fifty fans per game to attendance. It was also calculated that an NBA team of average quality in a city of 3.5 million with typical population and income characteristics, would draw about eight thousand fans per game. In a metropolitan area of 2 million population, the first star player on a team's roster was found to add about one thousand six hundred and fifty fans per game to attendance, not including his effect on the won-lost record. Ticket

price was found to have a significant negative influence on attendance. NBA membership was found to add one thousand and five hundred fans per game in a city of 2 million population. The quality of the team was found to be extremely important in professional basketball. It was found that a basketball team in a city of 2 million, if it wins one percent more of its games, can raise its attendance by .8 percent. Basketball, in contrast with the other sports, was found to be more successful in cities with higher average income. Finally, the fraction of a metropolitan area that is black was found to have a significant negative effect on attendance. The author attributed this finding to the effects of white racism, lesser interest by blacks and undesirable stadium location.

Baade & Tiehen (1990) based on Noll's (1974) baseball attendance research, developed their own model to explain attendance at professional baseball games. Their model included variables such as stadium capacity, black population, recent division winner, city population, age of the stadium, number of stars, attendance in the previous season, sports competition in the area, team standings, number of other baseball teams in the area and per capita income of the population. Regression analyses run indicated that the model explained eighty four percent of the total variance in attendance. The authors indicated that attendance, which is not explained by their equation, could be explained by promotional activity. In order to increase attendance, major league baseball teams use various promotions to encourage their fans to attend games. Evidence from previous research shows that daily attendance is positively influenced by promotion (Baade & Tuttle, 1990). The stadium capacity variable was found to be insignificant. This may suggest that the ambiance of a smaller park may counterbalance the higher attendance figures that larger stadiums can achieve. The stadium age was also found to have an insignificant contribution in terms of attracting fans. The number of star players was found to have a significant contribution to attendance. The analyses indicated that each additional star player translated into an additional 18,711 fans over an eighty one game home schedule. Competition from other sports had a significant negative effect on attendance. Each additional professional sports team hosted by a city decreased home baseball attendance by 65,732 fans over a season. Finally the black population variable was found to be insignificant. This contradicts the fact that the number of blacks playing

professional baseball has increased, and therefore black interest in baseball should be higher.

Demmert (1973) constructed an empirical model in order to investigate the demand for in-person attendance at major league baseball games. The variables used in the demand model were total home attendance for a club over the course of a season, price of admission, number of club games televised during the season, the stock of athletic talent employed by the club during the season, the relative quality of the club during the season, a vector of characteristics of the club's market and a vector of parameters affecting the club's pricing, employment and broadcasting decisions. The data included observations on sixteen major league clubs, eight from the NL and eight from the AL, over the period 1951-1969. Team quality was found to have a very significant effect on attendance. Population was also found to make a significant contribution to attendance. It was found that each additional million people in the club's market area increased demand for tickets by forty thousand per season. Direct (other baseball clubs) and indirect (other professional sports) market competition were found to have a significant negative effect on attendance. Televised games and ticket prices were found to affect attendance negatively. Each additional televised game was found to reduce in person attendance by four thousand. Finally, the number of years in a given market was found to be negatively associated with attendance. This might be the explanation of the trend toward increased franchise shifting by club owners.

Conclusion

The number of people in the stands directly affects not only ticket revenue but also concession sales, in-stadium and broadcast advertisers, sponsors and the amount of licensed merchandise sold on premises (Bovinet, 1999). Organizations need to communicate and build long-term relationships with their customers. Once the members of the non-attendance groups are identified and the appropriate databases are in place, leagues need to start practicing relationship marketing as opposed to the more traditional transaction marketing. Berry (1993) described relationship marketing as attracting, maintaining and enhancing customer relationships. He also contended that attracting customers is merely the first step in the marketing process.

Cementing the relationship, transforming indifferent fans into loyal fans, and servicing fans as clients are intrinsically important aspects of the marketing process. The utilization of new web 3.0 technologies (social networking platforms, mobile applications) can provide excellent results towards this direction. Understanding why people attend games is the first step. Professional teams and leagues need then to start contacting never, past and infrequent-attenders on a regular basis (Douvis, 2007). This way the teams and the league will not only enhance attendance, but will also build strong, long lasting relationships with their future fans.

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