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Abstract

It was the purpose of this preliminary project to measure how individuals perceive the impacts of sport in such areas as the economy, the environment, culture, community image and the quality of life, among other areas. The instrument was initially field tested in 1999 with a sample of 702 residents in the Northeastern part of the United States. Their views suggest that they perceive sports to make a generally positive contribution to their communities and the local region. Some negative impacts were also identified, mostly of an environmental nature. However, the findings suggest that sports for the most part are perceived to play a major role in the lives of people and contribute in significant ways to the economy, and community pride.

Key Words: *sport impacts, environment, economy, quality of life, community image.*

Sport appears to permeate every level of life and as a result of our passion with sport whole industries have evolved to manufacture, manage and promote this multibillion dollar, worldwide enterprise. Some of these have assumed the status of quasi religious institutions. The World Cup and the Olympic Games are probably the two most visible events of international stature that help ignite passions, provide for communal focus and enable an otherwise much divided world to celebrate, albeit for a short duration, the best that humanity has to offer by way of athletic prowess. However, much more is celebrated during such events. We often see demonstrations of great determination, courage and personal sacrifice; we see team work and strategy and we see how the latest in human ingenuity manifests itself in the use of sport technology.

The perceived effects of sport appear to spill over and influences many other areas of human life. The literature suggests that sport has the power to influence customs and traditions, language and fashion, property values and development, interpersonal relations, especially within the family, and it is claimed, it may also make a significant economic impact (Noll and Zimbalist, 1997; Nunn and Rosentraub, 1997; Sugden and Tomlinson, 1996). It is further argued that sport impacts the quality of life and has the power to influence how people feel about themselves, their state and their country.

In the international arena, whether it be the Olympics or the World Cup, the exposure that a nation receives on the world stage is often deemed adequate compensation for all the investment that has to be made to even make it to these prestigious world class events. Thus, hosting major world events is another way to benefit from such exposure. While the immediate economic benefits may not always be evident, nevertheless, the exposure that the venue receives ultimately translates into various other benefits including increased tourism dollars and goodwill toward the host nation.

Purpose of The Study

While much speculative material has been written extolling the virtues, benefits, and overall impacts of sport, relatively little has been produced in the social, political, economic and environmental domains that measure quantitatively how people perceive such impacts. And, the relationship between sport, the quality of life and prosocial behavior is even less clear.

It was the purpose of this exploratory project to investigate how sport is perceived to affect society in such areas as:

employment, property values, infrastructure, image, economy, environment and international promotion.

Review of Literature

Impacts of Sport on the Community

The impacts of sport have received more attention from economists than any other group of researchers (Noll and Zimbalist, 1997). Economic impact studies focus on a variety of gains or losses for the communities in which professional teams are located. The impacts often associated with professional teams are the revenues generated for the city, new jobs, taxes, and the multiplier effect of spending on the community.

Unlike sport, researchers in tourism have conducted considerable research on the sociocultural and environmental impacts of the tourism enterprise, including research from the residents' perspective (e.g. Lankford and Howard, 1994; Munasinghe and McNeely, 1994; Rothman, 1978). This line of research has focused on the perceived social, cultural, and economic impacts of tourism such as commercialization of cultural sites, increased traffic and tension in destination communities, and the types of jobs created for locals in the tourism industry. If the visiting of persons to communities that host professional and/or high profile sports teams, such as big-time college sports programs, are considered tourists (temporary visitors to a destination for leisure activity), then the impacts of sport may also be extended to tourism.

In studying the impact of sport on communities hosting professional sports teams, Nunn and Rosentraub (1997) found the purported benefits of sport to be nearly non-existent. The new jobs often associated with a professional team, especially high skill jobs, were not generated. In addition, no significant increase in beverage, food, hotel room rental, or payroll spending was attributable to sport teams in the communities studied. Even the population of the host communities grew at a slower rate than the populations of comparable communities in the area. Interestingly, the benefits associated with the teams were increased civic pride, entertainment opportunities, and the enhancement of the community's image. The authors argue that with little positive economic gain, the most prominent reasons for hosting a professional team may lie in the sociocultural domain.

Johnson (1986) examined the economic effects of football and baseball on the city of Baltimore. The author found that if financial profits and losses for the past seven years were summed, the city clearly received a net profit. Furthermore, if the city's expenditures on professional teams were compared to the city's budget as a whole, a relatively small amount of money was actually spent on such teams. Therefore, even if the teams failed to generate profits, as they did in three of the seven years studied, they were still perceived to contribute to the community. Specifically, the teams contributed to the city through intangibles such as increasing community identity and enhancing the «psychological health» of the community.

Sugden and Tomlinson (1996) studied the effects of the 1994 World Cup on United States residents. Some of the impacts identified in this study include watching the game as a social experience, the entertainment value of the game(s), civic pride, and economic factors such as income, business advertising, and costs associated with hosting teams. Additionally, some of the findings revealed that spectating provided an avenue for expressing political views and it also helped facilitate children's involvement in sport. Finally, the study found that Americans remained skeptical of soccer and this may underlie the game's inability to expand beyond the high school level.

Yiannakis (1994) found, in a survey of 600 residents of the State of Connecticut that the men's and women's basketball program at the University of Connecticut made a significant impact on their lives. Residents reported that having the teams in the state made their lives more exciting, improved the quality of their life, helped improve the image of the university and increased their predisposition to contribute financially to the university. The success of the basketball teams was also found to increase the number of State residents interested in studying at the university.

Theoretical Perspectives

Five groups of theories are described here that help explain the functions and impacts of sport for fans. These include: salubrious effects, stress and stimulation seeking, catharsis and frustration-aggression, entertainment and achievement seeking theories.

A group of theories predict the fans will experience increased positive feelings after viewing sports and are therefore attracted to sports as a result of the increased physical and mental well-being sports provide. A subset of the salubrious effect theories is the diversion theory. The diversion theory identifies activities that are used as an escape from work and the tedium of life, that add a new dimension to the individual's life and contribute to the individual's well being (Howard, 1979). Fan attraction to sport may also be the result of a type of kinesthetic satisfaction created by viewing sport (Harris, 1973). The fan understands what the sport participant is going through, and this understanding leads to the fan's attraction to the sport.

Stress and stimulation seeking theory views sport as a stressor that is sought out when individuals desire a particular amount of stress or stimulation in their lives. Sport in this role provides a socially acceptable mechanism for creating and experiencing tension, risk and stress (Klausner, 1968). Sport enables the individual to face desired challenges and risks, excitement and stimulation. Yet this explanation does not take into account those fans that follow sports on television (Sloan, 1979).

The catharsis theory proposes that the act of viewing aggressive sports helps the viewer release pent-up aggressions and frustrations. For the fan,

therefore, catharsis theory predicts that aggression will decrease after viewing an aggressive sport, regardless of the outcome (Howard, 1979). Yet, Howard (1979) notes, many acts of violence by sports fans occur after viewing aggressive sports. The work of Arms, Russell and Sandilands further points to the fact that the act of viewing aggressive sports contributes to the hostility of spectators and the lowering of «social affection» (the positive feelings people generally have toward each other).

Frustration-aggression theories propose that aggression in sport serves as a form of attraction for the individual. Fan attraction to sport may in fact be a result of the aggressive nature of the event itself. Frustration-aggression theories suggest that fan aggression in sport may increase by watching an event that justifies aggression, thus making the target for aggression more legitimate (Sloan, 1979). This may explain why fans, after watching their teams lose, tend to become more violent. It may also explain why winning increases aggression by serving to legitimate the losers as targets for aggression (Sloan, 1979).

Entertainment theories propose that attraction to sport is a function of the pleasure and satisfaction that is generated as a result of being entertained by the sport experience. Aesthetic theories explain sport as a result of spectators' appreciation of the movement and beauty as manifested in sport. Yet sport may also represent life's moral values, may contribute to character building and may even help prepare one to deal with the obstacles of life (Miller, 1970). Entertainment theories explain sport as attractive to the fan because sport represents, expresses, and teaches life's values. Yet if this were the case, a fan's experience viewing sports would always be positive regardless of the outcome of the event. Fans should feel their spirits lifted every time they view a game, yet what may be the case is that fans only feel their spirits lifted when their team wins the game (Sloan, 1979).

Achievement seeking theories emphasize the importance of success and failure and their impact on the fan's sports experience. If an individual's team wins, satisfaction and pleasure increase, while frustration decreases. A central component of the achievement seeking hypothesis is the concept of «Basking in Reflected Glory» (BIRG) (Sloan, 1979). BIRGing describes an individual who will attempt to associate with someone who has been successful in order to increase his/her feelings of success Sloan (1979) suggests that an individual is more likely to BIRG when the sports team he/she identifies with is successful and the individual had suffered a personal failure. Another central component to the achievement seeking theory describes the level of involvement a fan feels for his/her team. Fans may feel involvement with sports teams as an extension of their personal sense of self. Therefore, when their team wins, fans engage in BIRGing and feel a sense of achievement as well. If the team loses, fans may distance themselves from the team so as not to feel the impact of failure (Sloan, 1979). This involvement may go be-

yond mere association. Fans may believe they have an impact on the team, belong to the team, are recognized as part of the team, and contribute to the fan-team group (Sloan, 1979).

In order to empirically measure the impacts of sport on the fan, Sloan (1979) and colleagues measured fan emotions following basketball, football and boxing. Achievement seeking and frustration aggression theories best described the impact of the three sport events for fans viewing these games. Contrary to one aspect of achievement seeking and the BIRG phenomenon, fans did not seek to distance themselves from the team following a loss. This may support the notion that the fans may feel they are an integral part of the team, and, therefore, may be willing to share in the pain of defeat as well as the pleasure of success (Sloan, 1979). For all sports observed, it was found that fans were affected either positively or negatively by the outcome if they identified with one of the teams or competitors in the event.

In concluding, Sloan (1979) argues that even though achievement seeking and frustration-aggression seem to best describe the fan experience, all the theories presented may have different implications for individuals in different sport settings. Entertainment seeking theory may better explain the impact of sport for fans of individual sports who may focus on the aesthetic movements of the athletes. Secondly, as there are different theories for different sport settings, there are different fans for different sports. The characteristics that draw a fan to one sport may be better explained by one theory than by another, though achievement seeking and frustration-aggression do appear most relevant for fans across many sports. Finally, the impacts of sport on the fan may be different than the initial attraction to the sport. Fans may learn to love sport due to repeated exposure to sport, yet may experience many different consequences as a result of their involvement in sports.

Noneconomic Impacts of Sports

When assessing the impact of sports structures and sports teams, the noneconomic impacts felt by the city, state and community must also be addressed. Johnson and Sack (1996) discuss some of the noneconomic impacts felt by the city of New Haven, CT and its residents with the development of a tennis facility to host the Volvo International Tennis Tournament. The noneconomic factors discussed include political capital expenditure, potential for political conflict, community pride and solidarity, and sport's potential to improve a city's national and regional image. Using information from the Board of Aldermen for the city of New Haven, and in-depth interviews with nineteen key persons involved in negotiations, Johnson and Sack (1996) identified key issues that must be discussed when assessing the impacts of sports on cities and communities. In particular they note that in order to secure bonds and the

subsidies necessary for construction of the tennis center in New Haven, local politicians need to apply political pressure at the state level. It is also possible that the political capital expended to secure funding for the tennis center possibly took away funding for other projects in the city (Johnson & Sack, 1996). Though the answer to this question is difficult to ascertain, it is necessary to take into consideration when assessing the impacts of sports on cities and communities.

Development of a sports venue can also bring with it the potential for political conflict in the community. This conflict was apparent in New Haven when the tennis center's development team proposed using the facility as a concert venue at other times during the summer months. A section of New Haven close to the venue vehemently opposed this decision, and caused a great deal of negative publicity surrounding the tennis center proposal. Other groups within New Haven opposed the use of funds for development of the tennis center as well. As a poor inner city community, many politicians in New Haven felt the money could be better spent to help improve the conditions of such communities. Such political conflict, the authors note, generated negative publicity to the city of New Haven and the tennis center development project.

Community solidarity and civic pride are noneconomic impacts that must be accounted for when discussing the impacts of sport on the city and community. Unfortunately, tennis is not a sport that generates community loyalty through team identification, like the sports of baseball or football. Also, tennis has been, traditionally, an elite, upper class sport. In the city of New Haven, the tennis center project further divided the city's economic and ethnic communities instead of increasing community solidarity and civic pride.

A final noneconomic impact of sport on cities and communities is the promotion of the city and the attraction of new business to the city. In New Haven, no evidence exists that the development of the tennis center and the hosting of the Volvo International Tennis Tournament had attracted new business to locate in the city. In fact, businesses continued to leave the downtown area of New Haven following the construction of the tennis center. Yet public visibility and public relations in New Haven increased during the tennis tournament due to television coverage of the event on ESPN and the newspaper space devoted to the tournament.

In conclusion, Johnson and Sack (1996) emphasize the need for studies regarding the development of sports venues to focus on more than the economic factors that influence the cities and communities where the venue is being developed. It is important to recognize the intangible noneconomic factors that will influence the community and the city, including the political resources needed to implement such ventures. Further, the potential for political conflict, the impact on community solidarity, and the promotion of the community and city must also be given serious forethought.

Methods and Procedures

Subjects and Data Collection

The subjects for this study were 702 male and female residents of Connecticut, and American and international students attending two Northeastern universities. The subjects were interviewed by trained interviewers at various high traffic areas in malls, office complexes, apartment complexes, and on the campuses of the two universities in question. Given a variety of constraints it was impossible to obtain a true random sample. The sample, therefore, reflects quota sampling stratified by gender.

The respondents were asked to assess the impacts of sport in their own communities and on the State of Connecticut as a whole.

The Instrument

The original instrument was developed in 1999 by Yiannakis, Douvis, Servedio, Murdy, Burton and Cho in the Laboratory for Leisure, Tourism & Sport at the University of Connecticut. The final version was modified and updated by Yiannakis & Douvis in 2004. Initial conceptual categories were derived from the existing literature and contributions were made by members of the research team. The instrument underwent several rounds of modification and was tested and re-tested for face and content validity and reliability.

Reliability was initially tested with a sample of 34 students using the test-retest method over an eight day period. Items which failed to achieve a reliability coefficient of at least .60 were eliminated from the study. Subsequently, Cronbach's alpha reliability was tested with selected relevant items in the scale using a sample of 400 subjects. This yielded a coefficient of $r = .84$.

Face and content validity were determined by a five person panel of experts who had the option of accepting, rejecting or modifying items in the questionnaire. Items found wanting by at least three members of the panel were either eliminated or modified.

Results and Discussion

Basic Demographics

A total of 702 male and female residents of Connecticut, and American and international students attending two universities in the Northeastern United States participated in the study. Their basic demographics were the following:

a. Gender

52.8 % were female and 47.2% were male. Three subjects failed to respond.

b. Ethnic Background

67.4% were Caucasian
8.8% were African-American
0.2% were Native American
14.5 % were Asian or Asian American
3.2% were Hispanic or Hispanic-American
5.9% were classified as «Other»

c. Age

The age range was from 17 to 79 years with the majority being between the ages of 18 and 23. Fifteen per cent (15%) of the sample were between the ages of 30 and 79.

d. Marital Status

80.2 per cent are single, 16.6% are married, 2% are divorced

The majority of the respondents follow their favorite team on TV (65%), a 42% actually attends games and the remaining fans follow their favorite team on the radio (39.9%) and newspapers (23.5%).

Tables 1-11 involve the perceived impacts of sport in the areas of: employment, property values, promotion, infrastructure, image, economic impact, environmental impacts, crime, prosocial and antisocial behavior, and selected international impacts.

In terms of the impacts of sport on new job creation (Table 1), the results showed that Connecticut residents believe that sport has in general a positive contribution to their communities. This is in contrast with the findings of earlier research by Nunn and Rosentraub (1997). The authors found the purported benefits on communities hosting professional sports teams to be almost non-existent. The new jobs often associated with a professional team, especially high skill jobs, were not generated. This could be explained by the fact that over the last 6 years, the greater New England region and more specifically the state of Connecticut had a very successful run in collegiate and professional sports. One of the important noneconomic factors, which may have influenced the residents of Connecticut, is their high civic pride

and community loyalty through team identification. Fans, who are in a constant attempt to associate with the success of their teams (Uconn Huskies Basketball, New England Patriots Football) (Table 4), tend to overview the negative and some times non-existing impacts that sport may have for their community (Sloan, 1979).

Table 1. *Impacts Of Sport On Job Creation (N = 685).*

	Positive	Negative	No Impact	DK
In the State of Connecticut	70.4%	0.7%	8.9%	20.0%

Table 2. *Do Collegiate and Professional Sports Help Promote The State Of Connecticut? (N = 698).*

	Yes	No	DK
	83.2%	4.3%	1.7%

Table 3. *Impacts Of Sport On The Infrastructure Of The Region (N = 668).*

	Positive	Negative	No Impact
Roads and highways	19.8%	36.0%	44.3%
Mass transit (buses, trains)	21.0%	24.0%	54.9%
Airports	26.5%	10.8%	62.6%

Promotion and image of the State of Connecticut through collegiate and professional sports is reported on tables 2 and 5. As another demonstration of the achievement seeking hypothesis (Sloan, 1979), the residents of Connecticut viewed their successful sports programs as an excellent way to promote their state and improve the image of their communities. In accordance with the findings of the present study, Johnson (1986), Johnson and Sack (1996) and Nunn and Rosentraub (1997) found that some of the most impor-

tant benefits associated with hosting a professional team were the enhancement of the community’s image, public visibility and public relations.

Table 4. *Are You A Fan Of CT Collegiate Or Professional Sports Teams (N = 701).*

Yes	No	NR	UN
70.2%	15.4%	4.9%	9.6%

Table 5. *Impact Of Sport On Image Of The State Of Connecticut (N = 696).*

Positive	Negative	No Impact	DK
83.2%	1.4%	7.3%	8.0%

Sport was found to have a non significant impact on the infrastructure of the State of Connecticut (Table 3). Mass transit together with roads and highways were the two infrastructure areas, which were viewed by the residents as receiving the greatest amount of positive impacts from sport. This could be explained by the similar findings of Johnson and Sack (1996), who identified key issues that must be discussed when assessing the impacts of sports on cities and communities. In particular they noted that in order to secure bonds and the subsidies necessary for construction of the tennis center in New Heaven, local politicians needed to apply political pressure at the state level. It is possible that the political capital expended to secure funding for the tennis center, took away funding from other projects of the city (Johnson and Sack, 1996), which could be better spent to help improve the infrastructure of this poor inner city community.

The vast majority of the respondents viewed the economic impact of sport on the state of Connecticut as positive (Table 6). This is in accordance with the findings of earlier research by Johnson (1986), who examined the economic effects of football and baseball on the city of Baltimore. The author found that if financial profits and loses for the past seven years were summed, the city clearly received a net profit. Furthermore if the city’s expenditures on professional teams were compared to the city’s budget as a whole, a relatively small amount of money was actually spent on such teams.

Table 6. *Economic Impact Of Sport On The State Of Connecticut (N = 700).*

Positive	Negative	No Impact	DK
76.7%	3.0%	7.9%	12.4%

In terms of illegal activity in the State of Connecticut, the results showed that gambling, fights and alcohol abuse were viewed by the respondents as having an increasing pattern as a consequence of sport (Table 7). This finding could be explained by the stress and stimulation theory (Klausner, 1968), the frustration aggression theory (Sloan, 1979) and the diversion theory (Howard, 1979). Gambling is a mechanism used by sports fans for creating and experiencing tension, risk and stress. Fighting could be the result of the aggressive nature of a sporting event. Fans tend to be more aggressive after watching an event that justifies aggression. Finally drinking could be explained by the fact that it represents a way to enhance the experience of watching a sport by adding a new dimension, in order to make it a true escape from the tedium of everyday life contributing at the same time to the individual's well being.

Table 7. *Impacts Of Sport On Crimina/Illegal Activity In The State Of Connecticut (N = 689).*

	Increases	Decreases	No Impact	DK
Gambling	45.0%	1.5%	21.3%	32.2%
Theft	16.8%	2.6%	39.0%	41.5%
Vandalism	22.3%	2.5%	35.7%	39.5%
Prostitution	8.3%	2.3%	44.8%	44.6%
Assaults	22.0%	2.0%	34.8%	41.1%
Fights	32.1%	2.2%	29.6%	36.2%
Alcohol abuse	36.2%	2.6%	25.7%	35.6%
Drug abuse	22.1%	2.3%	34.2%	41.3%

Table 8. *Impact On Mood When Favorite Team Wins (N = 696).*

Makes me feel really good	48.0%
Makes me feel somewhat good	33.2%
Makes no difference	18.8%

The majority of the respondents as a whole feel really good when their favorite team wins (Table 8) and somewhat bad when their favorite team loses (Table 9). This can be explained by «Basking in Reflected Glory» (BIRG) (Sloan, 1979) the central component of the achievement seeking hypothesis. Residents of Connecticut attempt to associate themselves with the success of their teams in order to increase their feeling of success. In contrary, these occasional fans, when their team loses tend to distance themselves from it, so as not to feel the impact of failure (Sloan, 1979). The majority of identified fans of CT collegiate or professional sports teams feels really good when their team wins, while it makes no difference for the majority of non-fans (Table 10).

Table 9. *Impact On Mood When Favorite Team Loses (N = 694).*

Makes me feel really bad	9.90%
Makes me feel somewhat bad	51.40%
Makes no difference on how I feel	38.60%

Table 10. *Impact On Mood When Favorite Team Wins (For Fans And Non Fans, N = 698).*

	FANS	NONFANS
Makes me feel really good	60.70%	17.90%
Makes me feel somewhat good	32.10%	35.70%
Makes no difference	7.20%	46.40%

Almost half of the respondents believe that sports have a major contribution on the quality of their lives (Table 11). This is in accordance with the findings of earlier research by Yiannakis (1994), which suggested that the collegiate basketball teams of the University of Connecticut improved the life quality of residents all over the state.

Table 11. *Impact Of Collegiate/Professional Sports On Quality Of Life (N = 697).*

Make Life Better	46.50%
They Make No Difference	50.60%
They Make Life Worse	2.90%

Recommendations for future research

The findings of the present study suggested that despite some negative impacts, mostly of an environmental nature, sports for the most part are perceived to play a major role in the lives of people and contribute in significant ways to the economy, community pride and the quality of life. Further, there are indications that success in sport may «encourage» fans to engage in various forms of prosocial behavior.

Academics have yet to study other impacts of sport on the community, especially those that are seen by people to affect their lives in more personal or intimate ways. Some of these include the environment, psychological well-being, local and national pride, and the effects of winning or losing on prosocial behavior.

The impacts of sport have received more attention from economists than any other group of researchers (Noll and Zimbalist, 1997). Johnson and Sack (1996) emphasized the need for studies regarding the development of sports venues to focus on more than the economic factors that influence the cities and communities where the venue is being developed. It is important to recognize the intangible noneconomic factors that will influence the community and the city, including the political resources needed to implement such ventures. Further, the potential for political conflict, the impact on community solidarity, and the promotion of the community and city must also be given serious forethought.

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