

2008 SPORTSMANSHIP SURVEY: SUMMARY OF FINDINGS

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INTRODUCTION

Universities care generally about the quality of all of their programs, non-academic as well as academic. Academic programs are typically reviewed on a more-or-less regular cycle. Additionally, their students graduate and go on to graduate or professional schools, take positions in businesses or other organizations, start their own companies, and become part of other communities. As alumni, they become de facto representatives of the universities, reflecting the quality of education and training the universities' provide. But many graduates do not constantly wear their alma mater on their sleeve – or lapel, or breastpocket, or emblazoned across their chest except occasionally on T-shirts and sweatshirts. Their ties to a particular university for the most part are relatively inconspicuous, perhaps especially in the course of their worklives where the education and training provided by their universities are most demonstrated.

Instead, the frequently most public face of many universities is their athletic program. The performances of their sports teams receive much more attention in the press and other media than the research of their faculty or the accomplishments of their other students. In large measure, the reputation of the universities is significantly shaped by this much more public representation of the universities.

Successful athletic programs not only make recruiting outstanding athletes easier for future teams, they also make their universities more attractive to future other students as well. They enhance pride and positive affect among alumni.

However, how the athletic programs perform involves much more than their win-loss records and championship banners. It also involves how they comport themselves as they compete. The performance of the players, coaches, and, by extension, fans is generally viewed as reflecting the values of the universities and the culture they promote. It reflects their commitment to excellence, to competence, and to sportsmanship.

While sportsmanship typically focuses on the behaviors of players and coaches, it also encompasses the relations between players or coaches and the officials who monitor and enforce the rules of the game. But as sports have become much more public events, sportsmanship also has come to encompass the behavior of the spectators as well, for they too are extensions of the team and representatives of the universities. While the behaviors of spectators might more specifically be thought of as “fanship,” most of the rules guiding what is appropriate or inappropriate behaviors of fans in their interactions with the players, coaches, officials, the venue, or other fans are extrapolations from the general values of sportsmanship: playing fair, being respectful.

In recent years, there has been growing concern among officials of many universities and among owners of a number of professional sports teams that fan behavior is becoming increasingly unsportsmanlike. That is, increasing numbers of fans behave in ways that are disrespectful of players or coaches (especially of opposing teams) or their ancillary teams such as bands, cheerleaders, or attendants. A number of these behaviors are also viewed as disrespectful of and offensive to other fans.

Just as successful athletic programs may bring credit to and enhance the reputation of the universities, unsuccessful programs may discredit or mar the reputation of the universities. Sporting events serve as very public portraits of the universities.

Several years ago, the commissioners of the Big 10 Conference, began a media campaign directed at the fans of their athletic teams to encourage good sportsmanship on the part of the fans. The message was that good sportsmen were respectful of “the game” before, during, and after the game event. Earlier this year, the management of some professional football teams including the Detroit Lions, issued rules and guidelines for fan behavior intending to improve fanship at their events as well.

There are no known evaluations as to whether these efforts have had any impact. There are no studies we know of that established baseline rates of behaviors against which to compare rates over time to determine if the trends for appropriate and inappropriate behaviors have increased or decreased. There are no studies we know of that have determined how widespread the understanding of what “good sportsmanship” is. There are no studies we know of that indicate how concerned people connected with the universities (e.g., students, alumni, faculty and staff, administrators, and other community fans) are about the public portrayal of their universities currently being provided by behaviors at athletic events.

The study reported here was developed to begin to explore these issues and to provide at least baseline data. The focus is sportsmanship behavior, particularly of fans, at Michigan State University. The study was commissioned by President Lou Anna K. Simon to produce data that establishes a point-in-time assessment of what fans currently do and believe that would have three uses. The first is to provide the information necessary for determining the extent to which problematic behaviors are common. The second is to provide information that might be used to craft a campaign to reduce the prevalence of any problematic behaviors identified in the data. And the third is to provide the baseline rates for behaviors and beliefs against which subsequent studies can be compared to determine if any ensuing campaigns to change problematic behaviors have been successful.

President Simon requested that MSU’s Office for Survey Research design and conduct the study on behalf of the university. Although the study was conducted among fans at Michigan State University, the study was designed to be more generally applicable. Although the data produced would be specific to a particular university at which it was conducted, the questionnaire and methodology were intended to be more-or-less directly usable at almost any college or university.

An earlier study conducted at The Ohio State University for its “Best Fans in the Land” campaign was reviewed. However, that study was too specific to Ohio State University and did not address the full range of issues OSR researchers thought necessary to address MSU’s goals. Consequently, the 2008 Sportsmanship Survey was developed by OSR from scratch. It would not have been possible, however, without the full support of President Simon, Vice President Fred Poston (Finance and Operations), Vice President Lee June (Student Affairs and Services), and the MSU Department of Intercollegiate Athletics, and the MSU Alumni Association. Moreover, it would not have taken the particular approach that it did had it not been for the nearly eight years of collaboration between OSR staff and Dr. Dennis Martell and other health education staff of Olin Health Center. Much of this collaboration has focused on collecting data and applying it to reduce high-risk drinking on campus using a social norms marketing approach. The success of that approach with student drinking at MSU guided much of the design of this study of sportsmanship behaviors.

This is a report on the methodology and the findings of the study.

METHODOLOGY

Survey Design

The Sportsmanship Survey was designed to measure knowledge, beliefs, attitudes, perceptions and behaviors related to the conduct of athletes, coaches and fans in the stands at MSU athletic events. The questions were designed to be administered primarily as a web-based survey of three principal population groups, current MSU students, non-students who purchase tickets to MSU sporting events (especially football, ice hockey, and men's basketball), and MSU alumni living in Michigan and the surrounding midwest states.

The first administered was a survey of current MSU students – both undergraduates and graduate/professional students. For this, the questions designed to assess sportsmanship knowledge, beliefs, attitudes, perceptions and behaviors were added into the 2008 Spring Celebrations Survey conducted for the social norming project of Olin Health Center by the Office for Survey Research. This was the most recent of a series of surveys conducted nearly every semester to collect data on student drinking behaviors and perceptions used to evaluate efforts to reduce high-risk drinking among MSU students. The Celebrations surveys are typically administered to probability samples of only undergraduates. For the 2008 Spring Celebrations Survey, a probability sample of graduate/professional students was also included because of the inclusion of the sportsmanship questions.

The Spring Celebrations Survey was conducted between April 8 and April 23. A total of 1,209 students (1,087 undergraduates and 127 graduate/professional students) completed and submitted the on-line questionnaire. The overall response rate for this portion of the survey was 40.3%.

Data for the student sample has been weighted to ensure that the sample profile matches the profile of all MSU students during the 2008 Spring Semester on the basis of year in school, gender, race, and undergraduate/graduate student status. In general, a random sample of 1,209 has a margin of sampling error of $\pm 2.8\%$.

A web survey was also administered to probability samples of each of the other two population groups as well. With the cooperation of the MSU Department of Intercollegiate Athletics and the MSU Alumni Association, random samples were selected from individuals in their data bases of persons who have purchased tickets to MSU sporting events over the past five years and alumni in the five state area around and including Michigan. Because students had already been surveyed as a part of the Celebrations Survey, the list of individuals who had purchased tickets excluded students for sampling purposes. Both databases have email addresses listed for the majority of individuals within the databases.

However, since email invitations to participate in the web-based survey could not be sent to those without email addresses and the email addresses on file may no longer be up-to-date, OSR also selected a random sample of those for whom no email address was listed in either database. OSR prepared a paper version of the Sportsmanship questionnaire and mailed it to those sampled for whom there was a postal address but no email address and to those whose email addresses were no longer valid. OSR sent paper questionnaires to 485 of the ticket holders (40 were returned as undeliverable) and to 300 alumni (6 were returned as undeliverable).

The goal was to produce at least 400 completed responses from each the ticket holder sample and the alumni sample. A total of 419 individual ticket holders responded and 411 alumni responded. The margin of sampling error on the responses of the 419 ticket holders is

$\pm 4.8\%$ and on the responses of the 411 alumni is $\pm 4.8\%$.

Those who responded to the mailed questionnaire differed somewhat with respect to marital status, whether or not they have children, whether or not they had been student athletes, and on a number of other substantive sportsmanship items. That is, including this additional opportunity for members of these population groups to be included in the survey reduced potential bias in the survey results.

The web survey of the ticket holders sample began August 13 and concluded September 25. The response rate for this group was 32.3%. The web survey of the alumni sample began August 20 and concluded September 13. The response rate for this group was 26.9%

Questionnaire Content

The questions were designed to measure respondents' knowledge as to what constitutes good sportsmanship, their attendance at MSU sporting events, their judgements about the behavior of various groupings of individuals that are at sporting events (i.e., coaches, players, fans), their beliefs about what specific behaviors that might occur are acceptable or unacceptable, their perceptions of the prevalence of some of these behaviors, their self-reported participation in some of these behaviors, their judgments as to the affect sporting event behavior has on MSU's reputation, and their attitudes toward several policy options that might be considered to try to change behavior at sporting events.

Data Analysis

For the most part, we are interested in the responses to individual questions, but within each of the major population groups included in the survey, i.e., students (undergraduates and graduate/professional), non-student ticket holders, and alumni. We are also interested in the results for many of the items as normative standards operating at sporting events, i.e., what the majority of individuals attending the events do (descriptive norms), what the majority think is acceptable or unacceptable (subjective norms), and what the respondents believe the majority of individuals do (perceived norms).

It is the discrepancy between perceived norms and descriptive norms that holds the potential for using a social norms marketing approach to moderating the behaviors of the few that are outside the norms of the rest of the group attending events. That is, some of the 'undesirable behaviors' at such events may result from misperceived descriptive norms or subjective norms.

Some 'undesirable behaviors' may also result from ignorance as to what is 'good sportsmanship.' For these, a social norming approach or an educational approach has potential to change prevalence of undesirable behavior. And some 'undesirable behavior' may not be malleable using either approach, but may be responsive to more direct sanctioning of undesirable behavior.

For purposes of establishing what descriptive and subjective social norms operate at MSU sporting events, it is necessary to look at the combined responses of both students and the non-student ticket holders at sporting events. However, these should be represented in the datafile in correct proportion to their representation among those who attend events. MSU's Spartan Stadium has seating capacity for 75,005, of which roughly 17,000 seats are available for students, i.e., roughly 22.7% of those attending are students. Students make up similar proportions of those attending men's basketball and ice hockey events.

However, not all students reported attending any of the events. To represent the "fans in

the stands,” we have included only those students who reported attending at least one major athletic event this past year. We have included all those listed as ticket purchasers as a part of the “fans in the stands” even though some reported not attending an athletic event this past year, since they had very likely attended in one of the past two or three years. Many of those from the alumni sample who responded also reported having attended athletic events in the past year but were not listed in the ticket purchasers database. This could occur easily if, for example, a spouse or someone else had purchased the tickets for several people or they had been given tickets. In such situations, the individual alumnus’ name would not have been captured in the Athletic Department database. We have also included these alumni who reported attending MSU athletic events in the past year as a part of the “fans in the stands” also.

Therefore, to represent the normative judgements and behaviors of the “fans in the stands,” we have combined the sample of students who attended events with those of the ticket holders and the alumni who had attended events with the samples weighted so that student responses make up 22.7% of the responses.

RESULTS

Evaluating the Behavior of Fans

Most of those surveyed reported having attended a major MSU sporting event in the past year. This was the case for 75% of the undergraduates, 90% of the ticket holders, 63% of the alumni and 40% of the graduate/professional students.

Those who reported having attended at least one event were asked how much they enjoyed to overall experience of attending the game(s). **Nearly six out of ten reported enjoying the experience “a great deal” (58%), while 37% reported enjoying it “quite a bit.”** But, 62% of ticket holders, 61% of alumni, and 57% of undergraduates who had attended at least one sporting event said they enjoyed the experience “a great deal,” compared to only 37% of graduate/professional students.

Those who had attended at least one sporting event were asked to rate the sportsmanship of the coaches, team athletes, student fans, and alumni fans at the games they had attended. Table 1 below shows the percentage distribution of responses among each segment of the sample regarding the behaviors of each of the four groups of participants at the events.

Table 1 indicates that there are some relatively minor differences among the segments of the sample as to the ratings they give for each of the participant groups. Generally, the ticket holders and the alumni rate the behavior of coaches and players higher than do the student respondents. The table also indicates that all respondent groups rate the sportsmanship of coaches higher than the behavior of players, all rate the sportsmanship of players higher than the sportsmanship of alumni fans, and all rate the sportsmanship of alumni fans higher than the sportsmanship of student fans. Between 63% and 86% of respondents rated the sportsmanship of coaches as “very good,” between 49% and 65% rated team athletes’ sportsmanship as “very good,” and between 37% and 42% rated the sportsmanship of alumni fans as “very good,” but only between 14% and 29% rated the sportsmanship of student fans that highly. In fact, about one in three students and one in five non-student respondents rated the sportsmanship of student fans as “poor” or “very poor.”

Table 1. Percentage Distribution of Ratings of Sportsmanship Exhibited by Coaches, Players, Student Fans, and Alumni Fans at Sporting Events, by Segment of the Sample

Participant Group	Rating	% of Respondents					
		All Students	Undergrads	Grad/Prof.	Ticket Holders	Alumni	Fans in the Stands
Coaches							
	Very Good	65.6	65.8	63.2	86.0	77.9	78.5
	Good	33.5	33.3	35.8	13.8	22.1	21.2
	Poor	0.7	0.7	1.1	0.3	0.0	0.3
	Very Poor	0.1	0.1	0.0	0.0	0.0	0.0
	(N)	(806)	(711)	(95)	(363)	(253)	(1,384)
Team Athletes							
	Very Good	49.3	49.1	50.0	64.4	59.9	59.3
	Good	49.1	49.2	49.0	34.3	39.3	39.4
	Poor	1.4	1.4	1.0	1.4	0.8	1.2
	Very Poor	0.2	0.3	0.0	0.0	0.0	0.1
	(N)	(806)	(711)	(96)	(362)	(252)	(1,382)
Student Fans							
	Very Good	16.4	14.6	28.4	22.1	23.3	21.1
	Good	51.6	52.8	43.2	55.9	55.3	54.7
	Poor	26.3	26.1	28.4	19.6	17.8	20.6
	Very Poor	5.7	6.5	0.0	2.5	3.6	3.6
	(N)	(806)	(710)	(95)	(358)	(253)	(1,376)
Alumni Fans							
	Very Good	39.7	39.8	38.5	37.8	41.1	39.6
	Good	54.9	55.3	51.0	55.0	52.4	54.1
	Poor	5.1	4.5	10.4	7.2	5.2	6.1
	Very Poor	0.4	0.4	0.0	0.0	0.4	0.2
	(N)	(804)	(709)	(96)	(362)	(252)	(1,381)

The questionnaire asked respondents to indicate whether they thought the sportsmanship of each of the four participant groups has gotten better, gotten worse, or has stayed about the same over the past five years. The distributions of responses for these items among the various segments of the sample are shown in Table 2.

In general, Table 2 indicates that:

- C 20-50% of all respondents in all groups believe that the sportsmanship exhibited by coaches has improved over the past five years, while only 1-5% believe it has gotten worse;
- C 15-46% of all respondents in all groups believe that the sportsmanship of athletes has improved over this same period of time, while only 4-17% believe it has gotten worse;
- C 13-19% of respondents in all groups believe that the sportsmanship of the alumni fans has improved while 7-18% believe it has gotten worse; but,
- C 28-33% of respondents in all groups believe that the sportsmanship of student fans has gotten worse over this period of time while 13-17% believe it has gotten better.

Student respondents were actually slightly more likely than other respondents to indicate

they think student fan behavior has gotten worse (i.e., 33.2% of undergraduates vs. 29.6% of ticket holders and 32.7% of alumni).

Table 2. Percentage Distribution of Responses Regarding Change in Sportsmanship of Coaches, Athletes, Student Fans and Alumni Fans Over the Past Five Years, by Sample Group

	All Students	Undergrads	Grad/Prof.	Ticket Holders	Alumni	Fans in the Stands
Coaches						
Gotten Better	30.2	32.3	20.8	51.0	37.9	43.7
Gotten Worse	2.9	2.5	5.1	1.0	2.6	1.2
Stayed the Same	<u>66.8</u>	<u>65.1</u>	<u>74.1</u>	<u>48.1</u>	<u>59.5</u>	<u>55.1</u>
N=	1,158	943	216	414	385	1,454
Team Athletes						
Gotten Better	24.8	26.9	15.3	45.7	32.8	39.2
Gotten Worse	9.9	8.2	17.2	3.9	12.8	4.9
Stayed the Same	<u>65.3</u>	<u>64.9</u>	<u>67.4</u>	<u>50.5</u>	<u>54.4</u>	<u>56.0</u>
N=	1,156	940	215	414	384	1,453
Student Fans						
Gotten Better	13.8	13.9	13.3	16.5	13.3	15.4
Gotten Worse	32.3	33.2	28.4	29.6	32.7	31.0
Stayed the Same	<u>54.0</u>	<u>52.9</u>	<u>58.3</u>	<u>53.9</u>	<u>54.0</u>	<u>53.6</u>
N=	1,162	945	218	412	376	1,452
Alumni Fans						
Gotten Better	13.2	13.4	12.6	19.3	15.1	17.0
Gotten Worse	7.3	7.0	8.4	10.6	18.0	11.1
Stayed the Same	<u>79.5</u>	<u>79.6</u>	<u>79.1</u>	<u>70.1</u>	<u>66.8</u>	<u>71.9</u>
N=	1,156	941	215	415	377	1,457

The questionnaire asked respondents to indicate how great a need there is, if any, to improve the sportsmanship of fans at college/university sporting events. Table 3 shows the results.

Table 3. Percentage Distribution of Responses Regarding the Need to Improve Sportsmanship of Fans at College/University Sporting Events, by Sample Group

	All Students	Undergrads	Grad/Prof.	Ticket Holders	Alumni	Fans in the Stands
No Need At All	9.1	9.4	7.9	5.1	6.0	6.8
Small Need	<u>25.9</u>	<u>27.6</u>	<u>18.8</u>	<u>23.6</u>	<u>19.0</u>	<u>25.2</u>
Some Need	42.8	42.3	44.5	47.7	46.1	44.8
Large Need	16.1	15.2	19.7	16.1	21.3	16.4
Great Need	<u>6.2</u>	<u>5.5</u>	<u>9.2</u>	<u>7.5</u>	<u>7.5</u>	<u>6.7</u>
N=	1,176	948	229	415	399	1,467

Table 3 indicates that roughly two-thirds of each of the sample groups and of the fans in the stands believe that there is at least “some need” to improve fan sportsmanship. Undergraduates are less likely than others to believe there is at least “some need” to improve fan behavior, while alumni are more likely than others to believe there is at least “some need” to improve. Of the fans in the stands, 68% believe there is at least “some need” to improve fan behavior, with 23% believing there is a “large” or a “great need” for improvement. Only 7% of the fans in the stands believe there is “no need” for improvement.

The questionnaire asked respondents to indicate the extent to which, if at all, the unsportsmanlike behavior of fans negatively or positively affects various perceptions of the university or its students. For each of the six perceptions of the university, respondents could indicate whether unsportsmanlike behavior has a strong, moderate, or slight positive or negative impact on the perception or has an equally positive as negative impact. Table 4 below shows the results. For simplicity, we only show the percentages of respondents within each sample group who indicated believing that unsportsmanlike behavior has a positive effect (strongly, moderately or slightly) or a negative effect (strongly, moderately, or slightly).

Table 4. Percentage of Respondents Who Believe Unsportsmanlike Behaviors of Fans Have a Positive or Negative Effect* on Various Goals of the University, by Sample Groups

<u>Goal of the University</u>	<u>All Students</u>	<u>Undergrads</u>	<u>Grad/Prof.</u>	<u>Ticket Holders</u>	<u>Alumni</u>	<u>Fans in the Stands</u>
Perceived quality of education						
Negative effect	47.4	46.4	51.6	54.2	58.6	53.4
Positive effect	17.7	17.9	17.0	19.2	16.5	17.4
Marketability of the degree						
Negative effect	39.8	38.9	43.5	42.1	46.3	43.1
Positive effect	18.1	18.9	14.6	19.8	15.5	17.7
Ability to Attract High Quality Faculty						
Negative effect	41.5	40.2	46.3	43.9	47.1	43.8
Positive effect	18.9	19.7	15.9	18.4	14.1	16.9
Ability to Attract High Quality Students						
Negative effect	38.7	37.6	42.6	45.2	51.0	44.9
Positive effect	21.9	22.9	17.8	21.1	16.8	19.4
Ability to Obtain Financial Donations						
Negative effect	50.3	49.8	52.0	53.4	57.9	54.9
Positive effect	18.1	18.6	16.3	21.0	15.9	18.0
Ability to Gain Support in the Legislature						
Negative effect	46.2	45.9	47.0	49.3	53.9	50.7
Positive effect	17.3	18.0	14.8	16.4	12.3	14.4

* For each goal, the percentage of respondents who responded that the behavior has an equally positive as negative effect is not shown. In each case, it is equal to 100% minus the sum of the percentage believing there to be a positive effect and the percentage believing there to be a negative effect.

Table 4 indicates that among all groups, much larger percentages of respondents believe that unsportsmanlike behavior of fans has negative effects on university goals than believe it has positive effects. Generally, respondents are two to three times more likely to report believing it has negative effects than positive. Undergraduate students tend to be less likely to believe unsportsmanlike fan behavior has negative effects than are the graduate/professional students, the ticket holders or the alumni. And, alumni are the most likely to believe the unsportsmanlike behavior of fans has negative effects on these six university goals.

Among the fans in the stands, the table indicates that:

- C 55% believe it negatively affects the ability of the university to obtain financial donations (roughly three times more than believe it has positive effects);
- C 53% believe that the unsportsmanlike behavior of fans negatively affects the perceived quality of education provided by the university (roughly three times more than believe it has positive effects);
- C 51% believe it negatively affects the ability of the university to gain support in the legislature (more than three times more than believe it has positive effects);
- C 45% believe it negatively affects the ability of the university to attract high quality students (more than twice as many as believe it has positive effects);
- C 44% believe it negatively affects the ability of the university to attract high quality faculty (more than twice as many as believe it has positive effects); and,
- C 43% believe it negatively affects the marketability of a graduate's degree from the university (more than twice as many as believe it has positive effects).

Which behaviors are acceptable and which unacceptable?

To ascertain respondents' perceptions as to what specific behaviors of coaches, players and fans are acceptable and what behaviors are unacceptable, the questionnaire included a long list of various behaviors one might see at a typical major athletic event. The list included behaviors we assumed would be nearly universally perceived as acceptable (such as "*Fans yelling or chanting along with the cheerleaders to encourage their team*") and behaviors we assumed would be nearly universally perceived as unacceptable (such as "*Fans spitting or throwing things at the band or cheerleaders of the opposing team*"). These were included, partly as validity checks on responses to other items, and partly to add credibility to the responses to other behaviors should the results of these be used in social norms marketing efforts based on the survey's results. However, most of the behaviors listed were expected to be less universally judged to be acceptable or unacceptable and included specific kinds of behaviors regarding which the university frequently receives complaints.

Altogether, a total of 40 behaviors were listed to which respondents were asked to indicate whether the behavior was acceptable ("always or almost always acceptable," or "acceptable most of the time"), was unacceptable ("always or almost always unacceptable," or "unacceptable most of the time"), or was not a sportsmanship issue.

In constructing the questionnaire, we thought the total of 40 items was too many to ask each respondent to judge, so we divided the list into two halves and arranged to allow that a random half of respondents would be presented one list of behaviors to judge while the other random half would be presented the other list.

In dividing the list of behaviors, we separated behaviors that are similar except for a key element so that one group of respondents received one version and the other group received the

other. For example, the item “*Fans massing together outside the stadium, rink or arena after the game to celebrate a victory or protest a defeat*” was asked of one random half of the respondents, while the item “*Fans massing together outside the stadium, rink or arena after the game to celebrate a victory or protest a defeat in a way that results in property damage, injuries, or arrests*” was asked of the other random half of respondents. The key element that is different between the two items is whether or not the gathering of fans results in damage.

However, to check whether or not a difference in the responses to the two items between halves of the samples can be attributed to the key element or might be only the result of different people judging each, we included seven items in each list that were identical. If the results between the two random halves of respondents are virtually the same on these seven items, then we can be confident that the two halves of the samples would judge other items in very similar ways to each other.

This would mean that arranging the questionnaire so that all respondents did not have to provide judgments about all behaviors in order to reduce respondent burden was justified and did not reduce data quality. It would also mean that if differences are found between items like the examples above then the differences can be attributed to the key element differentiating the items rather than the fact that different respondents judged them.

Thus, each respondent judged a list of 23 behaviors regarding acceptability-unacceptability. Sixteen items in each list concerned the behaviors of fans. In the one list, two items concerned the behaviors of coaches and five concerned the behaviors of players, while in the other list, three items concerned the behaviors of coaches and four items concerned the behaviors of players. Five of the six items that were common to both lists concerned the behaviors of fans and two concerned the behaviors of players.

We have compared the distributions of responses to each of the seven items between the two halves of the samples within each segment of the sample, i.e., among the students, among the ticket holders and among the alumni. Within each segment of the sample, there were no statistically significant differences in the responses to the same item between the random halves of the sample. That is, both subsets of the sample for each segment answered the same questions the same way. Therefore, we will assume with confidence that the distribution of responses to items asked of only one random half of the respondents within each segment is an accurate, reliable estimate of the responses of the whole segment.

Table 5 shows the distribution of responses to each of the behavior items for each of the three main segments of the sample, all students, ticket holders, and alumni. The items displayed in the table have been sorted in descending order of the percentage of fans in the stands respondents who regarded the behaviors as always or almost always acceptable or acceptable most of the time. The table indicates that the distributions differ significantly among the three segments on 32 of the items. For the most part, the responses of the students differ most from those of the alumni with the responses of the ticket holders being generally more similar to those of the alumni than to those of the students.

Table 6 shows these distributions for the subset of all respondents identified as “fans in the stands.” The results shown in Table 6 are interesting in terms of which behaviors are perceived to be more acceptable or more unacceptable. It is also interesting that virtually all of the behaviors that involve swearing or vulgar words and phrases are judged as unacceptable most of the time or almost always by at least three-quarters of the fans in the stands. These results are also represented in Figures 1 and 2 where the relative acceptability or unacceptability of

Table 5. Percentage Distribution of Responses Regarding Acceptability/Unacceptability of Various Behaviors at Athletic Events, by Sample Group

Behavior at Athletic Event	Students						Ticket Holders						Alumni						p(P ²)
	Always Acceptable	Acceptable Most of the time	Un-acceptable Most of the time	Always Un-acceptable	Not Sportsmanship Issue	n	Always Acceptable	Acceptable Most of the time	Un-acceptable Most of the time	Always Un-acceptable	Not Sportsmanship Issue	n	Always Acceptable	Acceptable Most of the time	Un-acceptable Most of the time	Always Un-acceptable	Not Sportsmanship Issue	n	
Coaches shaking hands after the game	90.9	4.2	1.5	1.3	2.0	496	96.5	2.0	0.5	1.0	0.0	201	98.5	1.0	0.0	0.5	0.0	199	p<.01
Players shaking hands after the game.	88.7	5.9	3.4	1.2	0.8	594	89.8	8.8	0.5	0.9	0.0	215	93.8	5.8	0.0	0.0	0.5	208	p<.05
Fans yelling/chanting with the cheerleaders	84.2	10.0	3.6	0.8	1.4	590	90.2	7.4	0.0	0.9	1.4	215	87.6	9.6	1.4	0.5	1.0	209	NS
Players helping up an opposing player	86.2	9.9	1.3	0.8	1.7	596	81.6	15.4	0.5	2.0	0.5	201	87.5	10.5	1.5	0.0	0.5	200	NS
Fans wear same colors for game (e.g., a 'green-out').	83.1	8.1	2.2	1.7	4.9	591	90.7	4.7	0.5	0.5	3.7	215	86.1	7.2	1.0	1.0	4.8	209	NS
Fans painting their faces/bodies	80.2	13.3	1.0	0.7	4.9	596	71.4	23.6	0.0	0.5	4.4	203	63.0	27.0	1.0	1.5	7.5	200	p<.001
Fans applauding visiting team/coaches as introduced	61.9	19.3	9.3	5.2	4.2	591	66.5	19.1	6.0	4.2	4.2	215	68.6	21.7	2.9	1.9	4.8	207	NS
Fans yelling/waving arms to distract opposing player	39.4	36.4	11.1	8.6	4.5	594	40.3	39.3	12.9	5.5	2.0	201	31.8	37.4	14.6	12.6	3.5	198	NS
Fans yelling/chanting to make it difficult to communicate.	33.7	32.9	18.2	10.8	4.4	1185	36.4	35.9	15.3	8.1	4.3	418	27.6	36.7	16.7	14.0	4.9	406	NS
Fans massing outside stadium/rink/arena after game	14.2	46.3	21.6	11.3	6.6	592	19.2	46.5	15.5	9.4	9.4	213	17.1	44.9	21.0	10.2	6.8	205	NS
Fans disposing properly of trash they brought	33.0	6.6	9.4	30.0	21.0	594	35.4	2.5	4.0	26.3	31.8	198	36.4	3.6	3.1	27.2	29.7	195	p<.001
Fans booing/yelling insults at referee for no call against opposing team	10.3	36.0	34.5	16.4	2.9	592	5.4	30.7	41.1	21.8	1.0	202	3.0	26.6	33.7	34.2	2.5	199	p<.001
Fans chanting "who cares"/"you suck" opposing players introduced.	12.6	28.5	24.3	31.2	3.4	596	10.4	25.2	18.3	44.6	1.5	202	3.5	14.1	17.6	60.3	4.5	199	p<.001
Fans occasionally standing during play that obstructs view of others	8.9	29.4	29.3	16.6	15.9	598	7.4	22.7	34.0	23.6	12.3	203	7.0	21.1	33.2	19.6	19.1	199	NS
Fans booing/yelling insults at opposing team after they commit foul/penalty	10.1	34.3	32.2	20.5	2.9	594	5.5	26.0	32.5	34.5	1.5	200	3.0	19.5	33.0	43.0	1.5	200	p<.001
Fans booing/yelling insults at referee when makes call against home player	7.6	33.2	33.9	21.6	3.7	593	3.7	23.3	45.1	25.6	2.3	215	3.3	18.7	43.1	32.5	2.4	209	p<.001
Fans drinking alcohol while attending the game.	12.4	37.5	17.9	15.8	16.4	497	5.5	17.0	15.0	44.5	18.0	200	7.5	14.0	14.0	44.5	20.0	200	p<.001

Table 5. Percentage Distribution of Responses Regarding Acceptability/Unacceptability of Various Behaviors at Athletic Events, by Sample (Continued)

Behavior at Athletic Event	Students						Ticket Holders						Alumni						p(P ²)
	Always Acceptable	Acceptable Most of the time	Un-acceptable Most of the time	Always Un-acceptable	Not Sportsmanship Issue	n	Always Acceptable	Acceptable Most of the time	Un-acceptable Most of the time	Always Un-acceptable	Not Sportsmanship Issue	n	Always Acceptable	Acceptable Most of the time	Un-acceptable Most of the time	Always Un-acceptable	Not Sportsmanship Issue	n	
Fans booing/yelling insults at opposing team entering stadium/rink/arena.	9.5	27.8	29.7	29.4	3.6	589	7.4	16.3	27.4	47.4	1.4	215	4.8	17.9	22.7	51.7	2.9	207	p<.001
Trying to run-up the score	16.6	26.6	31.5	14.2	11.0	590	4.2	19.5	37.2	35.3	3.7	215	4.3	18.4	39.6	31.9	5.8	207	p<.001
Prolonged celebration after a score/big play	13.3	38.5	32.0	12.6	3.6	1187	3.3	16.0	47.5	31.3	1.9	419	2.5	19.2	44.0	33.9	0.5	407	p<.001
Players "trash talking" to opposing players.	5.5	28.0	35.6	29.1	2.8	1187	2.6	20.9	38.7	35.6	2.2	416	2.5	20.4	32.2	42.3	2.7	407	p<.001
Fans displaying signs ridiculing the opposing team	5.8	29.6	33.5	27.4	3.6	1184	3.8	20.2	32.5	42.1	1.4	416	2.2	13.2	28.1	54.3	2.2	409	p<.001
Fans onto field/court before game ends	10.6	21.0	29.1	35.3	4.0	595	7.4	15.7	16.7	55.4	4.9	204	3.0	14.0	19.0	56.0	8.0	200	p<.001
Fans standing continuously throughout game, obstructs view of others	10.0	26.2	25.5	19.6	18.6	591	2.8	9.8	31.3	47.7	8.4	214	2.4	10.5	29.2	42.6	15.3	209	p<.001
Fans yelling at or insulting fans of the opposing team.	4.2	21.7	33.7	37.1	3.2	590	0.5	9.3	25.6	63.3	1.4	215	1.0	7.7	24.4	63.6	3.3	209	p<.001
Fans wearing T-shirts that insult/uses vulgar words about opposing college	5.3	22.6	34.8	32.1	5.2	1188	1.2	8.1	25.4	61.0	4.3	418	1.2	6.1	21.4	66.3	4.9	407	p<.001
A coach swearing at a player on the sidelines.	3.6	16.8	33.0	38.2	8.5	591	3.3	7.4	32.1	51.6	5.6	215	1.4	6.7	25.8	60.3	5.7	209	p<.001
Fans being drunk while attending the game.	4.1	21.2	26.0	28.9	20.0	589	1.9	4.7	14.2	66.0	13.2	212	2.9	6.2	8.6	61.7	20.6	209	p<.001
Fans booing referees when enter stadium/rink/arena	3.4	11.3	28.4	51.0	5.9	592	3.3	5.6	24.2	62.3	4.7	215	1.0	8.2	19.7	68.3	2.9	208	p<.001
Players using tricks against rules to get advantage on opposing player	2.2	8.6	25.0	58.3	5.9	593	3.8	5.2	18.9	68.9	3.3	212	0.5	4.8	13.9	76.0	4.8	208	p<.001
A coach swearing loudly at an official/referee.	2.3	10.6	33.9	49.6	3.6	1190	1.9	4.6	22.3	69.3	1.9	417	0.5	4.7	17.2	74.8	2.9	408	p<.001
Fans yelling/chanting at opposing team involving swearing/vulgar language	3.8	15.2	31.4	45.7	3.9	1187	0.0	4.1	12.5	81.0	2.4	416	0.7	2.7	13.5	80.3	2.7	406	p<.001

Table 5. Percentage Distribution of Responses Regarding Acceptability/Unacceptability of Various Behaviors at Athletic Events, by Sample (Continued)

Behavior at Athletic Event	Students						Ticket Holders						Alumni						p(P ²)
	Always Acceptable	Acceptable Most of the time	Un-acceptable Most of the time	Always Un-acceptable	Not Sportsmanship Issue	n	Always Acceptable	Acceptable Most of the time	Un-acceptable Most of the time	Always Un-acceptable	Not Sportsmanship Issue	n	Always Acceptable	Acceptable Most of the time	Un-acceptable Most of the time	Always Un-acceptable	Not Sportsmanship Issue	n	
Fans leaving trash in stands of stadium/rink/arena	1.4	6.4	23.7	43.0	25.5	591	2.8	7.0	18.3	35.7	36.2	213	1.4	3.3	14.8	44.0	36.4	209	p<.01
A fan in the stands swearing at an official.	3.2	10.8	33.8	47.8	4.4	594	1.0	3.4	18.7	74.9	2.0	203	0.0	4.0	12.5	80.5	3.0	200	p<.001
A group of fans chanting at referee involving swearing/ vulgar words	2.7	10.3	33.6	49.0	4.4	590	0.9	2.8	13.0	80.9	2.3	215	1.0	2.9	13.0	80.3	2.9	208	p<.001
A coach throwing equipment in anger or protest	1.0	8.4	29.6	57.0	4.0	597	1.0	2.5	22.2	73.9	0.5	203	0.5	2.0	17.5	76.0	4.0	200	p<.001
Fans massing outside stadium/ rink/arena after game, property damage, injuries, or arrests.	2.5	4.8	14.5	70.9	7.2	598	0.5	0.5	5.9	86.1	6.9	202	1.0	2.5	3.5	85.9	7.1	198	p<.001
Players intentionally trying to injure an opposing team player.	1.0	1.5	9.9	82.9	4.7	597	1.5	0.0	2.5	94.1	2.0	202	0.0	0.0	2.5	95.0	2.5	199	p<.001
Fans spitting/throwing things at band/cheerleaders of opposing team.	1.2	0.5	8.9	84.7	4.7	594	1.5	0.0	2.0	93.5	3.0	201	0.5	0.0	2.0	94.5	3.0	200	p<.001

Table 6. Percentage Distribution of Responses Regarding Acceptability/Unacceptability of Various Behaviors at Athletic Events Among the Fans in the Stands

Behavior at Athletic Event		Fans in the Stands					n
		Always Acceptable	Acceptable Most of the time	Unacceptable Most of the time	Always Unacceptable	Not Sportsmanship Issue	
q157_21	Coaches shaking hands after the game	96.2	2.1	0.6	0.7	0.5	702
q155_11	Players shaking hands after the game.	90.4	7.4	1.0	0.7	0.5	768
q155_7	Fans yelling/chanting with the cheerleaders	89.6	7.5	0.6	0.8	1.4	770
q157_11	Players helping up an opposing player	84.8	12.2	1.3	1.1	0.6	705
q155_0	Fans wear same colors for game (e.g., a 'green-out').	89.2	5.9	0.8	0.8	3.4	769
q157_0	Fans painting their faces/bodies	72.6	22.3	0.4	0.4	4.2	709
q155_17	Fans applauding visiting team/coaches as introduced	63.5	21.6	6.0	4.3	4.6	768
q157_2	Fans yelling/waving arms to distract opposing player	40.8	37.9	12.6	5.7	3.0	704
q157_7new	Fans yelling/chanting to make it difficult to communicate.	37.4	35.6	15.7	7.4	3.9	1472
q155_21	Fans massing outside stadium/rink/arena after game	18.2	46.7	18.8	8.7	7.6	762
q157_3	Fans disposing properly of trash they brought	36.0	3.9	5.0	26.5	28.5	694
q157_14	Fans booing/yelling insults at referee for no call against opposing team	7.0	32.6	38.0	20.9	1.6	705
q157_15	Fans chanting "who cares"/"you suck" opposing players introduced.	10.4	24.1	20.3	42.3	3.0	705
q157_6	Fans occasionally standing during play that obstructs view of others	8.3	26.0	31.8	19.5	14.3	707
q157_13	Fans booing/yelling insults at opposing team after they commit foul/penalty	6.4	26.9	32.7	31.9	2.1	703
q155_15	Fans booing/yelling insults at referee when makes call against home player	4.7	26.0	43.0	24.2	2.1	769
q157_4	Fans drinking alcohol while attending the game.	8.3	22.2	15.4	37.0	17.2	703
q155_14	Fans booing/yelling insults at opposing team entering stadium/rink/arena.	8.1	21.4	27.7	41.6	1.2	765
q155_18	Trying to run-up the score	7.2	21.9	37.1	28.3	5.6	768
q157_5new	Prolonged celebration after a score/big play	5.8	22.5	44.0	25.8	1.9	1479
q157_17new	Players "trash talking" to opposing players.	3.5	23.8	36.7	33.9	2.0	1471
q157_1new	Fans displaying signs ridiculing the opposing team	4.0	22.1	32.5	39.6	1.8	1473
q157_20	Fans onto field/court before game ends	7.6	17.2	20.7	48.9	5.5	709
q155_5	Fans standing continuously throughout game, obstructs view of others	4.7	14.8	30.5	37.4	12.6	768

Table 6. Percentage Distribution of Responses Regarding Acceptability/Unacceptability of Various Behaviors at Athletic Events Among the Fans in the Stands (Continued)

Behavior at Athletic Event	Fans in the Stands					n	
	Always Acceptable	Acceptable Most of the time	Unacceptable Most of the time	Always Unacceptable	Not Sportsmanship Issue		
q155_12	Fans yelling at or insulting fans of the opposing team.	1.2	13.2	28.4	55.7	1.4	770
q157_12new	Fans wearing T-shirts that insult/uses vulgar words about opposing college	2.4	11.8	28.0	53.4	4.5	1477
q155_8	A coach swearing at a player on the sidelines.	3.0	10.4	31.8	49.2	5.6	770
q155_3	Fans being drunk while attending the game.	2.9	10.1	15.8	54.8	16.4	764
q155_16	Fans booing referees when enter stadium/rink/arena	2.9	8.3	26.8	58.9	3.1	768
q155_19	Players using tricks against rules to get advantage on opposing player	2.4	6.8	20.6	66.2	4.1	763
q155_9	A coach swearing loudly at a referee.	2.2	6.8	27.0	61.2	2.7	769
q157_22new	Fans yelling/chanting at opposing team involving swearing/vulgar language	1.3	7.1	18.1	71.4	2.0	1472
q157_8new	A coach swearing loudly at an official/referee	1.8	6.6	25.0	64.6	2.1	1477
q155_2	Fans leaving trash in stands of stadium/rink/arena	2.1	5.9	19.7	37.9	34.5	766
q157_8	A coach swearing loudly at an official.	1.3	6.4	22.7	68.2	1.4	708
q157_9	A fan in the stands swearing at an official.	1.4	5.4	20.8	69.7	2.7	707
q155_10	A group of fans chanting at referee involving swearing/ vulgar words	1.4	5.1	19.4	72.2	1.8	767
q157_10	A coach throwing equipment in anger or protest	1.0	3.8	23.6	69.4	2.3	708
q157_19	Fans massing outside stadium/rink/arena after game, property damage, injuries, or arrests.	1.1	2.0	7.7	82.1	7.1	704
q157_16	Players intentionally trying to injure an opposing team player.	1.0	0.3	4.7	91.2	2.8	705
q157_18	Fans spitting/throwing things at band/cheerleaders of opposing team.	1.0	0.1	3.8	91.6	3.4	704

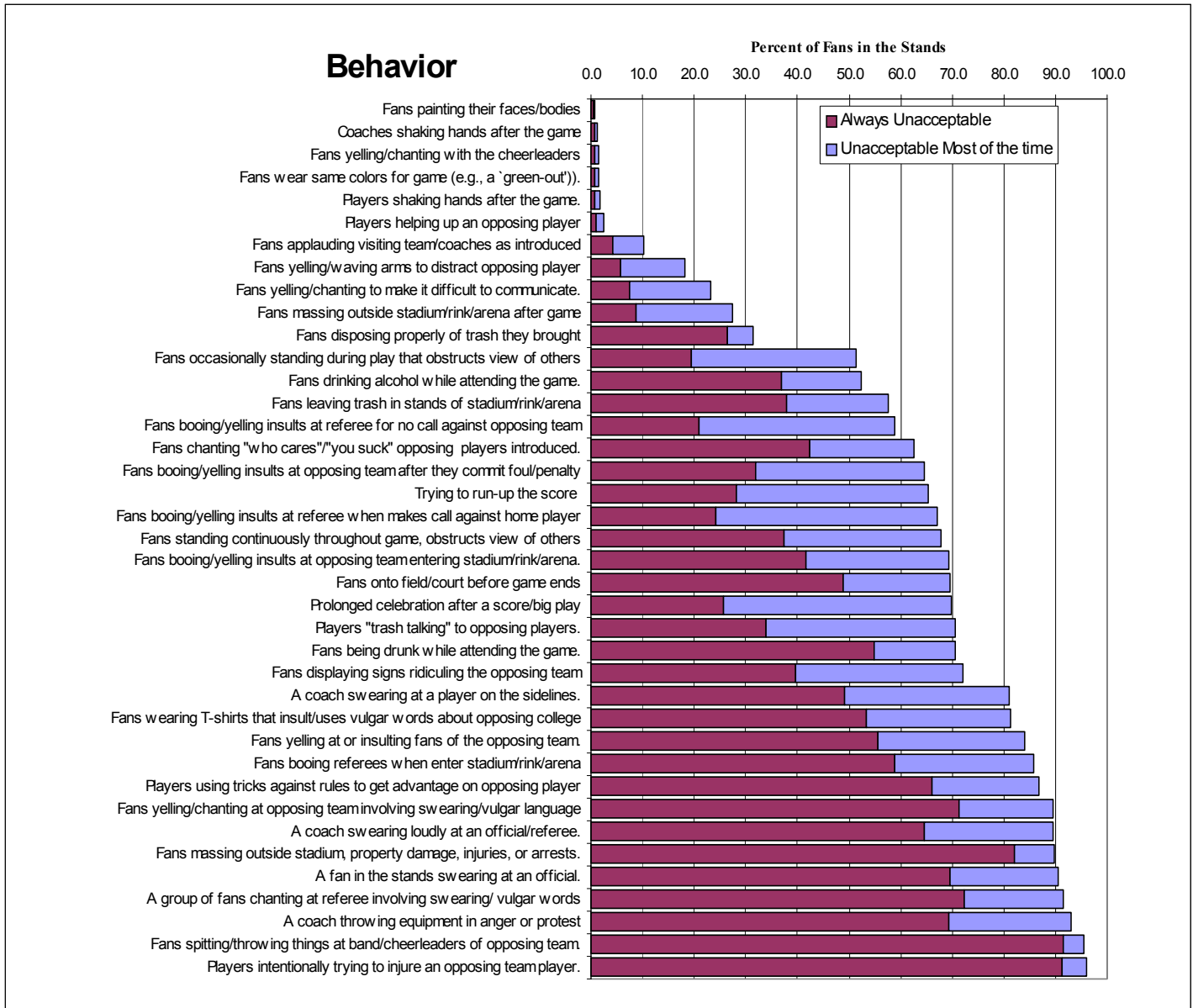


Figure 1. Percentage of Fans in the Stands Who Regard Various Behaviors at Athletic Events as “Always Unacceptable” or “Unacceptable Most of the Time”

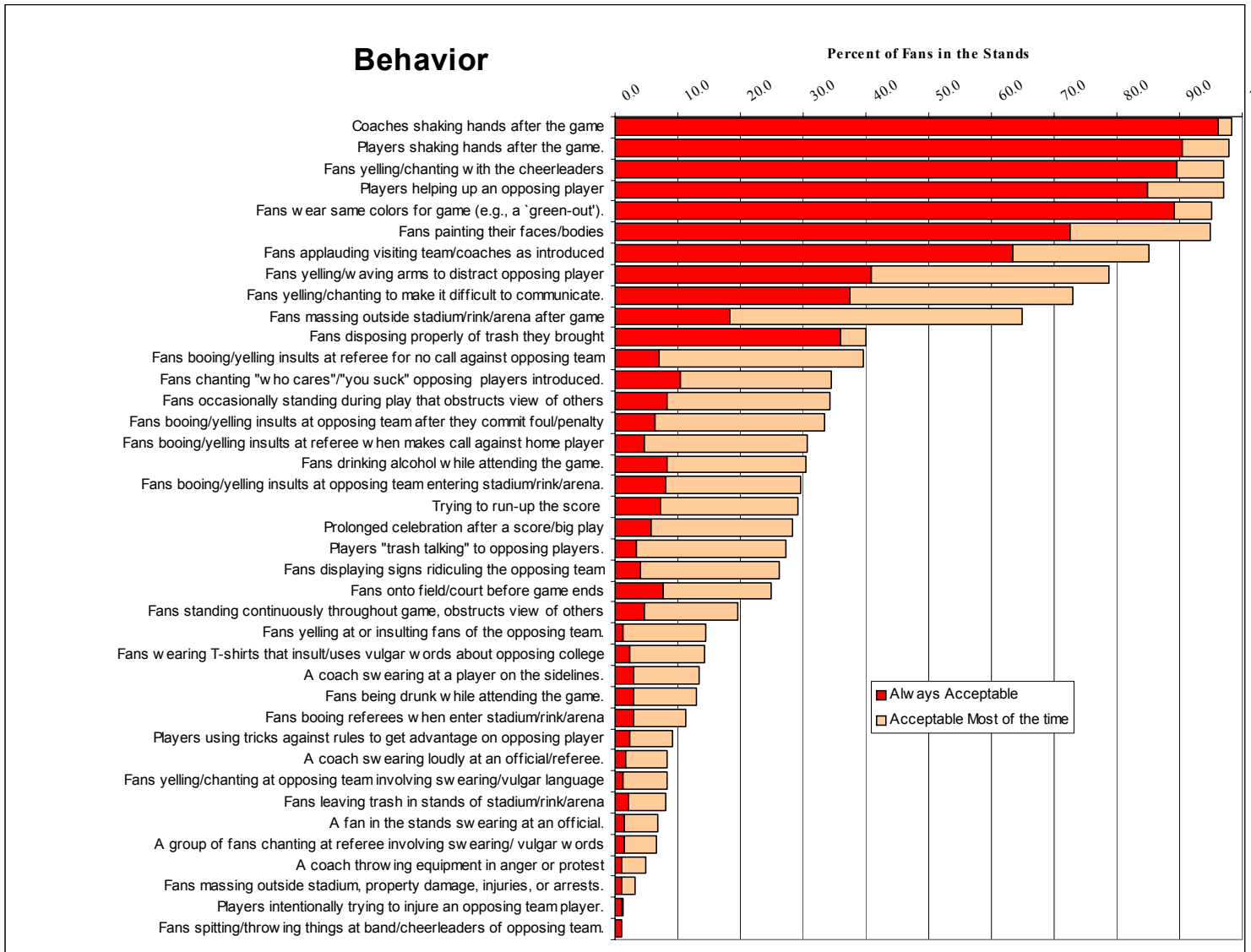


Figure 2. Percentage of Fans in the Stands Who Find Various Behaviors at Athletic Events “Always Acceptable” or “Acceptable Most of the Time”

the various behaviors may be more easily seen.

In Figure 1, the behaviors are sorted in ascending order based on the percentage of respondents who regard the behavior as either “always or almost always unacceptable” or “unacceptable most of the time.” In Figure 2, the behaviors are sorted in descending order based on the percentage of respondents who regard the behavior as either “always or almost always acceptable” or “acceptable most of the time.”

The results for this set of questions are particularly important in that they provide the subjective norms for each of these behaviors that can be used in a possible social norms marketing campaign to inform those who might attend athletic events what fans generally regard as acceptable and unacceptable behaviors. This is different from what fans actually do or what they perceive other fans to do. This is what those in attendance perceive as acceptable or unacceptable things to do at those events.

What is the perceived prevalence of various behaviors at athletic events?

In a social norms marketing approach to change behavior, some undesirable behavior is assumed to be the result of individuals trying to behave normally as they perceive what normal behavior is. That is, the perceived prevalence of a behavior creates, in a sense, peer pressure to behave accordingly. When the actual prevalence of the behavior is substantially different from the perceived prevalence, then providing accurate information about the actual prevalence can relieve the perceived peer pressure and instead creates a counter-pressure to behave in a more moderated manner.

Therefore, the sportsmanship questionnaire included two other sets of questions about behaviors. The first focused on respondents’ perceptions of what coaches, players and fans do and the second focused on what the respondents themselves as fans have actually done. The aggregation of respondents’ answers about their own behaviors will establish what the actual prevalence of a particular behavior is at athletic events, i.e., the descriptive norm for the behavior. The respondents’ perceptions of the prevalence of the behavior, particularly the behaviors of other fans, will establish the perceived norms of those behaviors. We can then compare perceived norms to descriptive norms for the same behavior to identify behaviors where a social norms marketing approach may be a viable behavior change approach.

The questionnaire asked respondents to estimate the percentage of coaches, players and fans in the stands that do each of several kinds of behaviors at an athletic event. Respondents were asked to give estimates for four different behaviors by coaches, five different behaviors by players, and eleven different behaviors by fans.

Table 7 shows that students generally and undergraduates in particular tend to **perceive** that larger percentages of coaches, players and fans in the stands participate in the more socially undesirable behaviors (as defined by respondents’ judgements of what behaviors are acceptable or unacceptable) and also tend to perceive that smaller percentages engage in the more socially desirable behaviors compared to ticket holders and alumni. For example, students estimated that 61% of fans in the stands boo or yell insults at the opposing team when they enter the stadium, rink or arena, while ticket holders estimated this to be 44% and alumni estimated 40% of fans routinely do this. Similarly, students estimated that 65% of coaches shake hands with opposing coaches or players after the game, while ticket holders and alumni both estimated that 93% of coaches do this.

The fact that students perceive that larger percentages of fans in the stands participate in the more socially undesirable behaviors would be expected to create either license or peer

Table 7. Mean Percent of Coaches, Players or Fans in the Stands Estimated by Sample Segment to Routinely Do Various Behaviors During Athletic Events

	Sample Segment					Fans in the Stands	p(F)
	All Students	Under-grads	Grad/Prof.	Ticket Holders	Alumni		
Coaches							
1 Swear at their players during the game	49.1	49.4	48.2	49.9	47.5	49.0	NS
2 Shake hands with opposing coaches/players after the game	65.1	65.3	68.8	92.8	92.8	76.4	p<.001
3 Swear at the officials	48.8	49.0	48.0	42.1	38.4	45.4	p<.001
4 Throw equipment or objects in anger or protest	23.3	23.2	23.8	17.9	17.1	21.0	p<.001
Players							
1 Help an opponent up who has fallen down	54.8	55.5	51.9	48.4	47.1	51.2	p<.001
2 Engage in "trash talking" at an opposing player	60.9	60.9	61.2	55.2	55.2	58.6	p<.001
3 Shake hands with the opposing players after the game	84.2	84.3	83.4	81.9	79.7	82.8	p<.001
4 Intentionally try to injure another player	20.1	20.2	19.5	12.1	13.3	17.1	p<.001
5 Engage in prolonged celebrations after a score or a big play	41.4	42.1	38.4	26.7	29.4	36.0	p<.001
Fans in the stands							
1 Dispose properly of trash they brought into the parking or tailgate areas	46.5	46.0	48.5	50.6	49.3	47.9	p<.01
2 Chant such things as 'who cares' or 'you suck' when opposing team players are introduced	61.3	65.3	45.0	41.7	36.7	52.4	p<.001
3 Wear T-shirts or other clothing that insults or uses vulgar words about an opposing college or university	32.3	33.4	27.8	14.6	15.7	25.4	p<.001
4 Boo or yell insults at the opposing team when it enters the stadium, rink or arena	61.1	63.5	50.8	43.8	39.9	53.3	p<.001
5 Applaud the visiting team and coaches as they are introduced at the start of the game	24.7	23.1	31.7	25.0	26.2	25.1	p<.001
6 Drink alcohol heavily enough to be drunk when they attend the game	41.0	42.1	36.2	21.9	23.2	33.6	p<.001

Table 7. Mean Percent of Coaches, Players or Fans in the Stands Estimated by Sample Segment to Routinely Do Various Behaviors During Athletic Events (Continued)

	Sample Segment					Fans in the Stands	p(F)
	All Students	Under- grads	Grad/Prof.	Ticket Holders	Alumni		
7 Boo the referees when they enter the stadium, rink or arena to be introduced	24.4	24.7	23.5	16.4	17.6	21.4	p<.001
8 Yell chants at a referee that involves swearing or vulgar words	33.9	35.6	26.8	16.1	16.4	26.8	p<.001
9 Boo or yell insults at members of the opposing team after they commit a foul or penalty	51.4	53.4	43.1	30.2	30.4	42.9	p<.001
10 Yell or chant along with the cheerleaders to encourage their team	73.0	75.1	64.4	67.1	65.1	70.2	p<.001
11 Participate in group chants that involve swearing or vulgar language directed at the opposing team	53.6	57.4	37.4	21.7	20.7	40.5	p<.001

pressure to engage in these same behaviors. However, whether or not this is a misperception depends on the actual prevalence of these behaviors.

What is the actual prevalence of some fan behaviors?

The questionnaire included a battery of questions in which respondents were asked to report how many times they had personally engaged in various of these behaviors while attending any of the games in the past year. Respondents could report having never done the behavior, having done it once, having done it two or more times, or that the respondent is not sure.

Table 8 shows the percentages of respondents within each sample segment who reported having done each of the behaviors. The table indicates that:

- C The percentages of respondents who report having participated in the behaviors considered unacceptable is greatest among the students generally and undergraduate students specifically.
 - 9 More than six out of ten undergraduate respondents report having participated at least once in each “chanting such things as ‘who cares’ or ‘you suck’ when opposing team players are introduced,” “booing or yelling insults at the opposing team when it enters the stadium, rink or arena,” “booing or yelling insults at members of the opposing team after they commit a foul or penalty,” “participating in a group chant that involves swearing or vulgar language directed at the opposing team.”
 - 9 Slightly more than half the undergraduate respondents report having participated two or more times in “chanting such things as ‘who cares’ or ‘you suck’ when opposing team players are introduced,” and “booing or yelling insults at members of the opposing team after they commit a foul or penalty.”
 - 9 Much larger percentages of undergraduates than respondents of any other group report drinking alcohol heavily enough to be drunk while attending a sporting event.
- C The percentages of the fans in the stands who report participating in any of the behaviors considered unacceptable are appreciably less than fifty percent – the only exception being “booing or yelling insults at members of the opposing team after they commit a foul or penalty” which 51% indicating having done at least once, but only 36% reported having done two or more times.
- C Students generally and undergraduates in particular were also more likely than other respondents to report having never participated in several of the acceptable behaviors “applauding the visiting team and coaches as they are introduced at the start of the game” and “disposing properly of the trash brought into the parking or tailgate areas.”

Is there a discrepancy between perceived and actual prevalence?

We have already noted that a social norming approach to changing some fan behavior may be possible because of the strong subjective norms of the various fan groups and the fans in the stands against some of the fan behaviors. A social norming approach would also be feasible if there is an appreciable discrepancy between what fans believe the norm (or the prevalence of

Table 8. Percentage Distribution of Number of Times Respondents Have Done Behavior _____ at Games in the Past Year, by Sample Segment

	Sample Segment																		p(P ²)
	All Students			Undergraduates			Grad/Prof. Students			Ticket Holders			Alumni			Fans in the Stands			
	Never	Once	2 or More	Never	Once	2 or More	Never	Once	2 or More	Never	Once	2 or More	Never	Once	2 or More	Never	Once	2 or More	
a. Chant such things as "who cares" or "you suck" when opposing team players are introduced.	44.6	10.1	45.3	38.3	10.5	51.1	75.7	8.6	15.8	77.5	6.3	16.2	82.4	4.3	13.3	69.5	6.8	23.6	<.001
b. Wear T-shirts or other clothing that insulted or used vulgar words about an opposing college or university	88.7	7.2	4.1	87.0	8.1	4.9	97.4	2.6	0.0	96.8	1.1	2.1	96.5	2.7	0.8	94.4	3.3	2.3	<.001
c. Boo or yell insults at the opposing team when it enters the stadium, rink or arena.	44.2	12.8	43.0	38.6	13.8	47.6	73.3	7.3	19.3	68.2	10.1	21.6	69.8	11.4	18.8	61.3	11.5	27.2	<.001
d. Drink alcohol heavily enough to be drunk when attending the game.	62.3	16.0	21.7	59.3	16.3	24.4	76.8	14.6	8.6	88.6	5.7	5.7	87.5	6.2	6.2	81.1	8.7	10.2	<.001
e. Boo the referees when they enter the stadium, rink or area to be introduced	85.6	6.2	8.3	84.0	6.2	9.8	93.3	6.0	0.7	93.2	1.9	4.9	95.0	3.1	1.9	91.5	3.4	5.1	<.001
f. Applaud the visiting team and coaches as they were introduced at the start of the game.	61.0	16.8	22.2	59.7	17.7	22.7	67.7	12.8	19.5	46.9	11.1	42.0	38.8	14.2	47.0	47.2	13.5	39.3	<.001

Table 8. Percentage Distribution of Number of Times Respondents Have Done Behavior _____ at Games in the Past Year, by Sample Segment (Continued)

	Sample Segment																		p(P ²)
	All Students			Undergrads			Grad/Prof.			Ticket Holders			Alumni			Fans in the Stands			
	Never	Once	2 or More	Never	Once	2 or More	Never	Once	2 or More	Never	Once	2 or More	Never	Once	2 or More	Never	Once	2 or More	
g. Yell chants at a referee that involved swearing or vulgar words	68.5	11.1	20.4	63.0	13.2	23.8	96.1	0.7	3.3	92.1	4.3	3.5	91.8	5.1	3.1	85.4	6.4	8.1	<.001
h. Boo or yell insults at members of the opposing team after they commit a foul or penalty	37.4	16.9	45.6	33.0	16.0	51.0	59.7	21.5	18.8	52.1	15.4	32.5	60.7	11.7	27.6	49.5	15.0	35.5	<.001
i. Dispose properly of the trash you brought into the parking or tailgate areas.	29.3	10.9	59.8	27.1	9.2	63.7	39.7	19.9	40.4	10.5	4.7	84.8	5.8	4.2	90.0	12.2	6.2	81.7	<.001
j. Participate in a group chant that involved swearing or vulgar language directed at the opposing team	47.5	12.3	40.2	39.8	13.4	46.8	86.4	6.8	6.8	92.1	2.7	5.2	92.6	4.3	3.1	80.2	5.6	14.2	<.001
k. Yell or chant along with the cheerleaders to encourage your team.	14.7	8.2	77.2	11.3	6.5	82.2	32.0	17.0	51.0	3.6	1.6	94.8	2.8	2.8	94.5	4.0	3.5	92.5	<.001

a behavior) is and the descriptive norm (or the actual prevalence).

We have also noted that it is primarily undergraduate students who report participating at appreciably higher rates in the unacceptable behaviors than respondents among the other sample segments. Therefore, the greatest potential impact of a social norming campaign would be among undergraduates if there is a key discrepancy between perceived and actual prevalence of behavior.

Table 9 compares the prevalence of the eleven fan behaviors among undergraduates and the fans in the stands noted in Table 8 to the perceived prevalence of these behaviors for both groups as noted in Table 7. In the rightmost panel of Table 9, the table shows the difference between the average percentage of fans who are perceived to engage in the particular question and the percentage of fans who reported actually participating in the behavior at least once. The leftmost column of this panel shows this difference between the perceptions of undergraduate students and the reported actual rate of behavior by undergraduate students. The middle column shows this difference between the perceptions of the total group of fans in the stands and the reported actual rate of behavior by fans in the stands. And the rightmost column in this panel shows the difference between undergraduate students' perceptions of what percentage of fans engage in the behaviors and the actual reported rate of the behaviors among all fans in the stands. **This is the key column to examine to determine if a social norming approach focused on descriptive norms is feasible.**

The table indicates that undergraduates over-estimate the percentage of fans who participate in the unacceptable behaviors even compared to the actual rate of behavior among students themselves. But, the prevalence of behaviors perceived by students is relatively more similar to their own actual rate of behavior than is the discrepancy between perceptions of fan behaviors of the fans in the stands and the actual rate of behavior of the fans in the stands. That is, students' perceptions of what is normal among fans is relatively closely correlated with their own rate of behavior. On the other hand, the much greater differences between perceived and actual rates of behaviors among the fans in the stands suggest that their perceptions are skewed by the rates of these behaviors among the students they witness. On the other hand, the undergraduates and the fans in the stands both substantially under-estimate the prevalence of fans participating in the acceptable fan behaviors.

More importantly, compared to the actual rate of behavior among the fans in the stands, the right-most column of the table indicates that students over-estimate the percentage of fans who. . .

C *“Chant such things as ‘who cares’ or ‘you suck’ when opposing team players are introduced” and “participate in a group chant that involved swearing or vulgar language directed at the opposing team” by 35-38 percentage points;*

C *“Yell chants at a referee that involved swearing or vulgar words,” “Drink alcohol heavily enough to be drunk when attending the game,” “Boo or yell insults at the opposing team when it enters the stadium, rink or arena,” “Wear T-shirts or other clothing that insulted or used vulgar words about an opposing college or university” by 21-28 percentage points;*

C *“Boo the referees when they enter the stadium, rink or area to be introduced” by 16 percentage points.*

Additionally, compared to the actual rate of behavior among the fans in the stands, students under-estimate the percentage of fans who. . .

C *“Dispose of the trash you brought into the parking or tailgate areas” by 42 percentage points;*

Table 9. Differences Between Perceived and Actual Prevalence of Behaviors Among Undergraduates and Fans in the Stands

	Mean % Perceived by . . . to Do ____		% Self-Report Doing ____ at Least Once		Difference Between Perception and Prevalence		
	Undergrad Students	Fans in the Stands	Undergrad Students	Fans in the Stands	Undergrad Students	Fans in the Stands	Undergrad Perception vs. Fans in the Stands Behavior
a. Chant such things as "who cares" or "you suck" when opposing team players are introduced.	65.3	52.4	61.6	30.4	3.7	22.0	34.9
b. Wear T-shirts or other clothing that insulted or used vulgar words about an opposing college or university	33.4	25.4	13.0	5.6	20.4	19.8	27.8
c. Boo or yell insults at the opposing team when it enters the stadium, rink or arena.	63.5	53.3	61.4	38.7	2.1	14.6	24.8
d. Drink alcohol heavily enough to be drunk when attending the game.	42.1	33.6	40.7	18.9	1.4	14.7	23.2
e. Boo the referees when they enter the stadium, rink or area to be introduced	24.7	21.4	16.0	8.5	8.7	12.9	16.2
f. Applaud the visiting team and coaches as they were introduced at the start of the game.	23.1	25.1	40.4	52.8	-17.3	-27.7	-29.7
g. Yell chants at a referee that involved swearing or vulgar words	35.6	26.8	37.0	14.5	-1.4	12.3	21.1
h. Boo or yell insults at members of the opposing team after they commit a foul or penalty	53.4	42.9	67.0	50.5	-13.6	-7.6	2.9
i. Dispose of the trash you brought into the parking or tailgate areas.	46.0	47.9	72.9	87.9	-26.9	-40.0	-41.9
j. Participate in a group chant that involved swearing or vulgar language directed at the opposing team	57.4	40.5	60.2	19.8	-2.8	20.7	37.6
k. Yell or chant along with the cheerleaders to encourage your team.	75.1	70.2	88.7	96.0	-13.6	-25.8	-20.9

- C “Applaud the visiting team and coaches as they were introduced at the start of the game” by 30 percentage points; and
- C “Yell or chant along with the cheerleaders to encourage your team” by 21 percentage points.

These results suggest a social norming approach is feasible by providing descriptive norm information regarding the actual prevalence of behavior to correct the misperception that is common among the undergraduate students in particular.

Is an educational approach viable?

As mentioned above, a social norming approach assumes that at least a portion of problematic behavior occurs because individuals (1) generally want to be normal and (2) they misperceive what the norm for a particular behavior really is. Another reason why some individuals might behave inappropriately is that they misunderstand, have been misinformed, or were never trained how to do something or how to behave. That is, lacking a basic understanding of a concept, such as “sportsmanship” in this case, individuals are left to rely on their observations and perceptions of the behaviors of others as to what is acceptable or appropriate. If someone does not know what good sportsmanship is, encouraging them to be a “good sport” will not likely produce the behaviors intended. That is, perhaps some portion of the inappropriate behaviors of coaches, players or fans could possibly be corrected by an educational approach that clarifies what it means to be a “good sport.”

To evaluate whether or not an educational approach could work to moderate or eliminate problematic behaviors, we included questions in the questionnaire that would constitute a brief test of the respondents’ knowledge of what sportsmanship means. For the conceptualization and description of ‘sportsmanship,’ we relied on the entry in Wikipedia.

The entry for sportsmanship in Wikipedia indicates that:

Sportsmanship is conformance to the rules, spirit, and etiquette of sport. More grandly, it may be considered the ethos of sport. It is interesting that the motivation for sport is often an elusive element. Sportsmanship expresses an aspiration or ethos that the activity will be enjoyed for its own sake, with proper consideration for fairness, ethics, respect, and a sense of fellowship with one's competitors. Being a "good sport" involves being a "good winner" as well as being a "good loser".[1]

Often the pressures of competition, individual achievement, or introduction of technology can seem to work against enjoyment by participants. As a result, sportsmanship may be contrasted with gamesmanship.

Examples of poor sportsmanship are winners "rubbing salt in the wounds" of the losers, or the losers expressing frustration at not winning, perhaps to the point of holding a grudge, booing the winner's national anthem (at an event such as the Olympics) or failing to congratulate the winners.

Sportsmanship typically is regarded as a component of morality in sport, composed of three related and perhaps overlapping concepts: fair play, sportsmanship, and character.[2] Fair play refers to all participants having an equitable chance to pursue victory[3] and acting toward others in an honest, straightforward, and a firm and dignified manner even when others do not play fairly. It includes respect for others including team members, opponents, and officials.[4] Character refers to dispositions, values and habits that determine the

way that person normally responds to desires, fears, challenges, opportunities, failures and successes and is typically seen in polite behaviors toward others such as helping an opponent up or shaking hands after a match. An individual is believed to have a “good character” when those dispositions and habits reflect core ethical values. This is important to a lot of sports.

Sportsmanship can be conceptualized as an enduring and relatively stable characteristic or disposition such that individuals differ in the way they are generally expected to behave in sport situations. In general, sportsmanship refers to virtues such as fairness, self-control, courage and persistence[5] and has been associated with interpersonal concepts of treating others and being treated fairly, maintaining self-control in dealing with others, and respect for both authority and opponents. Five facets of sportsmanship have been identified:

- C Full commitment to participation (e.g., showing up, working hard during all practices and games, acknowledging one’s mistakes and trying to improve);*
- C Respect and concern for rules and officials;*
- C Respect and concern for social conventions (e.g., shaking hands, recognizing the good performance of an opponent);*
- C Respect and concern for the opponent (e.g., lending one’s equipment to the opponent, agreeing to play even if the opponent is late, not taking advantage of injured opponents);*
- C Avoiding poor attitudes toward participation (e.g., not adopting a win-at-all-costs approach, not showing temper after a mistake, and not competing solely for individual prizes).[6]*

Using the Wikipedia definition of sportsmanship and clarifications, we constructed an eight item set of phrases. Five of the phrases directly represented behaviors or attitudes that characterize good sportsmanship according to the Wikipedia article. The other three items represented attitudes or behaviors that would be at odds with good sportsmanship according to the article. For each item, respondents were asked to indicate whether the phrase is or is not a part of what good sportsmanship means.

Table 10 shows the percentages of respondents from each sample group and from the fans in the stands who gave the correct answer to each item. From these eight items, we constructed a sportsmanship knowledge test score that could range from 0% correct to 100% correct. The average sportsmanship knowledge test score for each sample group is also shown in the table. For simplicity purposes, we have grouped respondents into three categories based on their scores on the test, those who scored 90-100% correct, those who scored 70-89% correct, and those who scored less than 70% correct. The percentage distribution of scores in these categories for each sample group is also shown in the table.

The table indicates that graduate/professional students had the highest average score on the test while ticket holders had the lowest. Table 10 indicates that nearly a quarter (23%) of the fans in the stands had a score less than 70% correct. The table also indicates that undergraduate students – who have been identified in the other results reported above as more involved in participating in the problematic, “unsportsmanlike” behaviors – scored appreciably better on the test than did either the ticket holders or the alumni despite the fact that respondents in the latter two sample segments were much less likely to participate in the problematic behaviors.

Table 10. Percent of Respondents Answering Sportsmanship Knowledge Test Items Correctly, by Sample Group

Item	% Answering Correctly					
	Students					Fans in the Stands
	Correct Answer	Undergrad- uates	Graduate/ Professional	Ticket Holders	Alumni	
1 Being respectful of the game officials	Yes	94.0	97.5	78.1	84.0	83.6
2 Finding ways to win at almost any cost	No	89.4	94.5	72.1	80.4	79.1
3 Playing the game fairly, i.e., playing by the rules	Yes	99.0	98.3	80.7	87.2	87.2
4 Being respectful of the other teams' players and coaches	Yes	96.3	96.2	98.6	99.5	98.2
5 Doing "unto" the opponent as they have "done unto you"	No	68.1	82.4	83.5	86.7	80.6
6 Trying to gain advantage through physical or psychological intimidation	No	71.6	78.1	60.5	67.6	64.2
7 Being gracious in victory and defeat	Yes	96.8	97.5	93.7	95.5	95.1
8 Focusing more on enjoying the game rather than the outcome	Yes	78.9	80.2	74.8	77.6	75.5
Average Sportsmanship Knowledge Test Score		86.7	90.4%	79.7%	84.4%	82.6%
% Scoring 90-100%		42.2%	57.6%	36.5%	43.8%	39.3%
% Scoring 70-89%		44.5%	34.9%	33.6%	36.1%	37.7%
% Scoring Less Than 70%		13.2%	7.6%	29.9%	20.0%	23.0%

This raises the question as to whether or not the knowledge of what sportsmanship means is, in fact, correlated with participation in the fan behaviors listed in the questionnaire.

As we have constructed codes for these variables (i.e., test score category and frequency of participating in a behavior), a negative correlation means that those with higher scores on the test (know more about what sportsmanship means) tend to report engaging in the behavior less often or never. A positive correlation means that those with lower scores on the test tend to engage in the behavior more often.

Among respondents representing the fans in the stands, the correlations between scores on the test (90-100% correct, 70-89% correct, or 0-69% correct) and how many times the respondents did the behavior (never, once, two or more times) varies from $-.107$ (“*Applaud the visiting team and coaches as they are introduced at the start of the game*”) to $.090$ (“*Boo or yell insults at the opposing team when it enters the stadium, rink or arena*”). Of the eleven behaviors, only one has a correlation greater than the absolute value of $.100$. That is, all of the correlations are very weak to the point of representing, for all practical purposes, no correlation between knowledge of sportsmanship (represented by the test scores) and relevant fan behaviors.

This ‘no correlation’ finding, however, was in the aggregate of all fans in the stands. The ticket holder and alumni sample segments had very low rates of engaging in most of the behaviors (low variance) even though they had substantial variance in scores on the knowledge test. If there is very little variance on a variable then it cannot be correlated with a variable that has considerable variance. On the other hand, students had much greater variance on participation in the behaviors. Therefore, it may be that there is a correlation between knowledge and behavior for some groups and not for others.

To examine this, we have calculated the correlation coefficients between sportsmanship test scores and the frequency of engaging in each of the eleven behaviors, but we have done this separately for undergraduates, graduate/professional students, ticket holders and alumni. The correlations are presented in Table 11.

The table indicates that there is only one statistically significant correlation between sportsmanship knowledge test scores and the various behaviors among the ticket holders and the alumni. Among the graduate/professional students, there are four behaviors that have weak but statistically significant correlations with test scores. However, among the undergraduates, nine of the eleven behaviors have weak but statistically significant correlations with test scores. In each case, the correlation indicates that individuals’ with a greater understanding of what sportsmanship means tend to be less likely to engage in unacceptable behaviors and more likely to engage in acceptable behaviors.

These correlations suggest that an attempt to help fans understand better what being a good sport means may reduce some of the problematic fan behaviors. There appears to be no effective effort to do this currently. We have compared the sportsmanship knowledge test scores among those who attend MSU athletic events and found no significant difference in the percentage of respondents who score 90-100%, 70-89%, and 0-69% across the Freshman, Sophomore, Junior, and Senior classes. Between 13% and 17% of the respondents had scores of less than 70% correct on the test across the four classes while between 39% and 44% of respondents had scores of 90-100% correct on the test. Sophomores tended to do the best on the test, Seniors the worst, with Juniors performing slightly better than Freshmen.

Table 11. Correlations Between Sportsmanship Test Scores and Frequency of Participating in Various Behaviors at Athletic Events in the Past Year, by Sample Segment

Frequency of Doing _____ Behavior Last Athletic Year	Sample Segment				Fans in the Stands
	Undergraduate Students	Grad/Prof. Students	Ticket Holders	Alumni	
a. Chant such things as "who cares" or "you suck" when opposing team players are introduced.	.26**	.19*	.00	-.01	.03
b. Wear T-shirts or other clothing that insulted or used vulgar words about an opposing college or university	.20**	.09	-.07	-.08	-.01
c. Boo or yell insults at the opposing team when it enters the stadium, rink or arena.	.25**	.31**	.09	.06	.09*
d. Drink alcohol heavily enough to be drunk when attending the game.	.14**	.15	.06	.06	.05
e. Boo the referees when they enter the stadium, rink or area to be introduced	.19**	.25**	-.01	.01	.04
f. Applaud the visiting team and coaches as they were introduced at the start of the game.	-.14**	-.01	-.08	-.17*	-.11
g. Yell chants at a referee that involved swearing or vulgar words	.26**	.06	-.02	.03	.04
h. Boo or yell insults at members of the opposing team after they commit a foul or penalty	.22**	.28**	.04	.14	.09*
i. Dispose properly of the trash you brought into the parking or tailgate areas.	.04	-.09	.04	-.05	.03
j. Participate in a group chant that involved swearing or vulgar language directed at the opposing team	.19**	.09	-.04	.00	-.01
k. Yell or chant along with the cheerleaders to encourage your team.	.06	.08	-.029	-.08	.01

* $p(r) < .05$; ** $p(r) < .01$

Graduate/professional students tended to score higher on the test than did undergraduates. Female undergraduate students and female graduate/professional students tended to score higher than their male counterparts.

These results can be used to construct the demographic profile of the fans toward whom an educational effort should be directed. These results suggest that it is reasonable to expect such an effort could reduce some of the problematic fan behaviors.

In Table 11, we have focused on the correlation between knowledge of what sportsmanship means and actual behavior. In the interest of minimizing the burden on respondents, we only asked about their participation in eleven behaviors. But understanding sportsmanship might be expected to influence what behaviors are considered by the respondents

to be acceptable or unacceptable in an athletic event as well. Therefore, we have similarly calculated the correlation coefficients between respondents' scores on the knowledge test and how acceptable or unacceptable they thought each of the 40 behaviors are that are represented in Tables 5 and 6.

This analysis among the fans in the stands did find 24 of the 40 items to be correlated with sportsmanship knowledge test scores. In general, the correlation coefficients were relatively weak, i.e., stronger than the correlations between test scores and behaviors shown in Table 11 for the fans in the stands, but generally not quite as strong as those in Table 11 for the undergraduates. Nevertheless, the correlations consistently indicated that those who scored well on the knowledge test were more likely to describe the non-problematic behaviors as acceptable and the problematic behaviors as unacceptable, while this was the reverse for those who scored poorly on the knowledge test.

This further suggests that an education approach may be potentially effective at changing fan perceptions of what is appropriate as well as changing behaviors.

Environmental Management Options

A third possible approach to reducing the prevalence of unacceptable sportsmanship behaviors of fans involves sanctions and enforcement. For purposes of the survey, eight environmental management options were suggested for listing to respondents. None of these have actually been proposed and none of these are currently, actively being discussed.

The eight suggested options are:

- A. Disperse student assigned seats throughout the stadium
- B. Enforce open container rules once the game starts (i.e., no open containers allowed)
- C. Ban alcohol from tailgate events
- D. Take away privileges, such as revoking future game or season tickets, depending on the severity of the violation
- E. Ban the wearing of offensive clothing (i.e., clothing with swearing, vulgar, or demeaning phrases)
- F. Penalize a team for the foul language of its fans
- G. Remove fans from the stadium for using foul language
- H. Put video cameras in the stands to identify fans misbehaving

For each of these, respondents were asked to indicate how strongly they would support or oppose implementation of the option. Table 12 shows the results for each of sample segments.

It is readily apparent from the table that the responses of students, ticket holders and alumni differ significantly on each of the eight options. For the most part, the responses of ticket holders and alumni are much more similar to each other than their responses are to those of students.

Remember that the ticket holder segment of the sample included some MSU alumni and many of the alumni segment of the sample included individuals who attended athletic events in the past year even though their names did not appear in the data base of individuals who

Table 12. Percentage Distribution of Responses Regarding Degree of Support/Opposition to Various Environmental Management Options, by Sample Segment

Sample Segment	Environmental Management Option							
	A.	B.	C.	D.	E.	F.	G.	H.
All Students								
Strongly Support	3.6%	21.7%	5.8%	20.3%	17.0%	3.5%	8.5%	10.4%
Somewhat Support	11.0%	29.5%	10.7%	41.2%	29.2%	9.3%	24.8%	25.0%
Somewhat Oppose	19.1%	24.6%	21.4%	21.0%	28.1%	22.3%	33.3%	27.2%
Strongly Oppose	66.3%	24.2%	62.2%	17.5%	25.7%	64.9%	33.4%	37.4%
Undergraduates								
Strongly Support	3.6%	21.2%	4.0%	17.1%	14.8%	3.0%	6.5%	7.1%
Somewhat Support	9.1%	29.7%	10.0%	40.6%	28.7%	8.4%	21.3%	25.2%
Somewhat Oppose	18.0%	24.6%	21.4%	21.8%	29.3%	19.4%	35.0%	27.2%
Strongly Oppose	69.3%	24.5%	64.6%	20.5%	27.2%	69.2%	37.2%	40.5%
Graduate/Professional Students								
Strongly Support	3.5%	23.7%	13.3%	33.6%	26.2%	5.2%	15.9%	24.0%
Somewhat Support	19.3%	28.9%	13.3%	43.5%	30.9%	13.0%	39.2%	24.0%
Somewhat Oppose	23.7%	24.6%	21.5%	17.7%	23.2%	33.8%	26.7%	27.5%
Strongly Oppose	53.5%	22.8%	51.9%	5.2%	19.7%	48.1%	18.1%	24.5%
Ticket Holders								
Strongly Support	7.6%	51.4%	10.2%	45.5%	37.0%	10.0%	35.3%	24.2%
Somewhat Support	12.4%	22.0%	15.0%	33.6%	31.4%	18.9%	35.7%	30.5%
Somewhat Oppose	23.4%	13.3%	23.3%	12.7%	20.1%	26.7%	19.1%	24.2%
Strongly Oppose	56.6%	13.3%	51.5%	8.3%	11.5%	44.4%	9.9%	21.1%
Alumni								
Strongly Support	5.2%	49.6%	13.4%	44.0%	39.7%	9.9%	31.3%	23.3%
Somewhat Support	13.4%	22.6%	17.3%	37.3%	30.0%	18.5%	42.1%	31.4%
Somewhat Oppose	27.3%	12.9%	28.5%	12.4%	19.9%	24.9%	16.5%	24.8%
Strongly Oppose	54.1%	14.9%	40.8%	6.2%	10.4%	46.7%	10.1%	20.5%
	***	***	***	***	***	***	***	***
Fans in the Stands								
Strongly Support	5.1%	43.4%	9.1%	36.9%	32.1%	7.9%	26.3%	19.6%
Somewhat Support	10.2%	22.5%	12.8%	37.0%	29.0%	15.7%	33.8%	27.9%
Somewhat Oppose	20.9%	16.2%	22.9%	15.6%	23.6%	22.9%	22.6%	25.5%
Strongly Oppose	63.9%	18.0%	55.2%	10.5%	15.2%	53.5%	17.3%	27.0%
Sum of Strongly and Somewhat Support	15.3%	65.9%	21.9%	73.9%	61.1%	23.6%	60.1%	47.5%

purchased tickets. Therefore, in separate analyses, we re-grouped all these non-student respondents into those who reported being an MSU alumnus and those who said they were not. Then, among those who reported attending an athletic event, we compared their responses on the eight options and found there were no statistically significant differences between the distribution of responses of alumni and the distribution of responses of non-alumni fans on six of the eight items. The two options on which there are statistically significant differences are option A (“Disperse student assigned seats throughout the stadium”) and option G (“Remove fans from the stadium for using foul language”). The MSU alumni are more strongly opposed to dispersing the seats to which students are assigned in the stadium, rink or arena than are the non-alumni, non-student fans. And, the non-alumni, non-student fans are more supportive than alumni fans of removing fans from the stadium for using foul language.

Among the fans in the stands, Table 12 indicates that:

- C By a nearly 3:1 margin, the fans in the stands support option D (73.9% vs. 26.1%) – “Take away privileges, such as revoking future game or season tickets, depending on the severity of the violation”;
- C By a nearly 2:1 margin, the fans in the stands support option B (65.9% vs. 34.2% – “Enforce open container rules once the game starts (i.e., no open containers allowed)”;
- C More than six out of ten fans in the stands support option E (61.1% vs. 38.8% – “Ban the wearing of offensive clothing (i.e., clothing with swearing, vulgar, or demeaning phrases)” – and option G (60.1% vs. 39.9%) – “Remove fans from the stadium for using foul language”.

The majority of students generally and undergraduates specifically are supportive of options B (“Enforce open container rules once the game starts (i.e., no open containers allowed)”) and D (“Take away privileges, such as revoking future game or season tickets, depending on the severity of the violation”) but not of the remaining six options listed.

The table also indicates that the majority of fans in the stands oppose option A (“Disperse student assigned seats throughout the stadium”) by a 6:1 margin, option C (“Ban alcohol from tailgate events”) by a nearly 4:1 margin, and option F (“Penalize a team for the foul language of its fans”) by a 3:1 margin. These options are opposed by the majority of respondents in each segment of the sample.

A slim majority oppose (52.5% oppose vs. 47.5% support) option H (“Put video cameras in the stands to identify fans misbehaving”). Students – and especially the undergraduates – more strongly oppose this option than do the ticket holders or alumni. In fact, the table indicates that 67% of the undergraduates said they oppose putting video cameras in the stands to identify fans misbehaving during a game.

The results for this section of the questionnaire suggest that several of the suggested environmental management options would be supported by the MSU community of fans. Whether the options would effectively reduce the problematic behaviors is a different question. These results can be used to gauge the amount of “push-back” that might arise from a decision to implement any one of these options.

SUMMARY

This report has focused on fan behavior at university sporting events – fan behavior at Michigan State University sporting events in particular. It summarizes the results of surveys of the student body during the Spring Semester of 2008 and surveys of alumni in Michigan and surrounding states and non-students who have purchased MSU athletic tickets over the past five years.

The survey found that the vast majority of respondents have attended MSU athletic events and enjoyed the experience very much. Most would welcome the opportunity to repeat the experience. Those who choose not to attend are much more likely to indicate that the cost, or their busy schedules are the reasons for not attending rather than because of the offensive behaviors of the fans, coaches or players.

The results indicate that all groups of respondents believe the degree of sportsmanship exhibited by coaches, players and non-student fans is quite good and either staying the same as it was five years ago or has improved. All groups of respondents also believe the degree of sportsmanship exhibited by student fans is appreciably less good and either staying the same as five years ago or has gotten worse.

Substantial majorities of all groups of respondents indicated believing that there is at least some need to improve the sportsmanship of fans. By fairly wide margins, respondents of all groups believe that the unsportsmanlike behavior of fans has a negative effect on the ability of the university to achieve important goals, e.g., obtain contributions from donors, gain support in the legislature, attract high quality students and faculty, produce graduates with marketable degrees perceived as having received an excellent education.

On many specific kinds of behaviors one might observe at athletic events, there is considerable variation across groups as to what is considered acceptable and what is considered unacceptable behavior. It is clear that substantial portions of some groups, especially undergraduates, believe a number of specific types of behavior are acceptable which are judged as unacceptable by substantial majorities of other groups. That is, there are differences in the subjective norms of the various groups comprising the fan community and they may be unaware of the degree to which their views are out of line with the overall subjective norms of the larger fan community. This is particularly true of those who commonly make up the spectators at major athletic events. This finding establishes the potential viability of a social norming approach to changing behavior by providing fans – especially with views outside the larger normative perspective – with accurate information as to what the true subjective norms are.

The report has also presented information from respondents regarding the perceptions as to how common various sportsmanship-related types of behaviors are among coaches, players and fans and then the self-reported frequency with which the respondents have engaged in these behaviors in the past year at athletic events. The findings indicate substantial differences among the various groups of respondents regarding how prevalent they believe various behaviors are. These are the respondents' perceived norms for the behaviors. The findings also indicate substantial differences among the various respondent groups regarding how prevalent – based on their self-reported behaviors – these behaviors actually are. These are the descriptive norms for the behaviors. The report also found sizable differences between the perceived and descriptive norms for nearly all the behaviors, especially in the cases of behaviors judged to be unacceptable. Consistently, respondents over-estimated the prevalence of unacceptable behaviors and underestimated the prevalence of acceptable behaviors. This discrepancy was noted as especially great between the perceived norms of undergraduate fans and the descriptive norms (the actual rates of behaviors) of the fans in the stands at athletic events. The results in this case also point to the likelihood that the implementation of a social norming approach could be effective at reducing

the prevalence of unacceptable behaviors by clarifying what the majority of fans actually do.

Additionally, the surveys examined the extent to which respondents have a full understanding of what good sportsmanship is. The surveys found generally good scores on the brief test constructed for the survey to measure knowledge of sportsmanship, but among those who attend athletic events, nearly a quarter score less than 70% correct on the test. Scores were higher among students and lower among non-students ticket holders and alumni.

Nevertheless, the data indicated that among students there is a weak but direct correlation between sportsmanship knowledge and behavior as a fan. Those who scored more poorly on the test were more likely to report more frequently participating in the unacceptable fan behaviors and less likely to report participating in the acceptable fan behaviors. Similarly, among all respondents who attend athletic events, those who scored more poorly on the test were more likely to judge unsportsmanlike behaviors as acceptable, while those who scored better were more likely to judge unsportsmanlike behaviors as unacceptable. These findings suggest that an educational approach intended to better educate fans as to what good sportsmanship, either in addition to or instead of a social norming approach, may also reduce the amount of unsportsmanlike behaviors of fans.

Finally, the report examined the responses of respondents to a set of suggested environmental management strategies intended to deter fans from participating in problematic behaviors and to apprehend and reprimand fans who do. The findings indicated fairly strong support for several of the environmental management options listed. This approach, therefore, appears also to be a viable option for addressing concerns about fan behaviors.