Demographic and Personality Characteristics Associated with Persistent, Occasional, and Non-attendance of University Male Basketball Games by College Students

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Student attendance at two university basketball games played during different years was used to examine the characteristics of occasional and persistent direct sport consumers. In addition, the characteristics of such consumers were examined when a "star" performer was present. The results supported the contentions that life style and identification are important factors in sport consumption. However, preference for action-oriented activities and social support also were important factors, and they were particularly relevant for describing the persistent consumer. The presence of a "star" performer did not attract disproportionately larger numbers from student groups that typically do not attend sporting events.

La présence des étudiants à deux matches de basketball universitaire qui ont eu lieu des années différentes a été étudiée, et le résultat a été utilisé pour analyser les caractéristiques respectives des "consummateurs de sport" occasionnels et assidus. Par ailleurs, les caractéristiques de ces consommateurs ont été examinées lorsqu'un joueur célèbre était sur le terrain. Les résultats ont confirmé l'hypothèse que le style de vie et le phénomène d'identification sont des éléments importants dans la consommation de sport. Cependant, la préférence pour des activités orientées vers l'action, et à dominante sociale, est également un facteur important, particulièrement significatif dans la description du consommateur assidu. La présence d'un joueur célèbre n'a pas attiré un nombre nettement plus important de spectateurs parmi les groupes d'étudiants qui d'habitude n'assistent pas aux événements sportifs.

The present study used a sample of 1036 sophomore college students to examine the relationships between attendance at university male basketball games and selected demographic and personality characteristics of students. The study followed a study (STUDY 1) conducted during the previous year that used all four academic classes, \(n = 1869\) (Schurr, Ruble, & Ellen, 1985), and incorporated data for the present sample that were collected during the previous study.

The demographic characteristics were gender, local residence, race, and distance of the students' hometowns from the university. The personality characteristics were: (a) vocational orientation, which was assessed by student choice of academic major, and (b) preferences for different types of activities, which were assessed by the extraversion-
introversion scale of the Myers-Briggs Type Indicator (MBTI) (Myers, 1962, 1980) and the
four temperaments that Keirsey and Bates (1978) derive from the MBTI sensing-intuitive,
thinking-feeling, and judging-perceiving scales. STUDY 1 had considered these variables
and, in addition, the variables of academic class and achievement. Academic class and
achievement were found to be unrelated to attendance in STUDY 1, and, as a result, they
were not considered in the present study.

The basic data for the attendance variable were provided by the presence or absence
of students at one week-night game played during the students' first (freshman) year at the
university and a second week-night game played during the students' second (sopho-
more) year. Both games were played during the middle of January. The NCAA Division IA
scoring leader was playing on the home team in the second game, whereas he was not
playing in the first game. In addition, data were collected for part of the sample regarding
whether attendance at the second game was the first game attended during the second
year. These latter data were only partially complete as it was not evident to the
investigators until after the study had begun that the data could be obtained. These data
were used only in a secondary analysis as a check on the group that was defined as
persistent attenders.

The principal analyses involved four groups of students. Three of the groups attended
one or both games (ATT+; n = 518): attended only the first game (STAR-; n = 128), only
the second game (STAR+; n = 307), or both games (PERSIST; n = 83). Together, students
in the STAR+ and STAR- groups were identified as occasional attenders (OCC). The
fourth group was a random sample of sophomore students who did not attend either game
(ATT-; n = 518).

**Purpose**

Three comparisons of the four groups were of interest: (1) attenders and non-
attenders (ATT+ vs. ATT-), (2) persistent and occasional attenders (PERSIST vs. OCC),
and (3) occasional attenders of games with and without the "star" playing (STAR+ vs.
STAR-).

Two purposes were served by the comparison of the ATT+ and ATT-groups. First, the
comparison provided a quasi-replication of STUDY 1. Second, it was possible in the
present study to examine the interaction between the MBTI and demographic character-
istics, which was not possible in STUDY 1 because of the smaller sample size for which
the MBTI data were available.

The comparison of the PERSIST group to the OCC group served to identify
characteristics associated with persistent attendance at the games. Information regarding
the relationship between personality characteristics and persistent attendance is not
presently available in the literature.

The comparison of the STAR+ group to the STAR- group served to identify charac-
teristics of occasional attenders whose attendance may have been influenced by the

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presence of the "star." The overall student attendance at the second game was about twice
that of the first game (2,000 vs. 1,000), even though the won-loss records of both teams
were about .500. Ostensibly, the larger attendance at the second game was partly due to
the addition to the team of the "star" player.

A limiting factor for the study is that only two games were used to identify the four
student groups. As a result, it cannot be said that students in the ATT- group had never
attended a game, and it may be that students in the PERSIST group had by chance
attended only the two games used in the study. However, the attendance data collected
during the latter part of the present study suggested that those students identified with the
PERSIST group were more likely to be persistent attenders than students identified with
other groups. First, attendance at the second game by students in the PERSIST group was
the first game attended during that year for only 8% of the 83 students. In comparison, it
was the first game attended by 35% of the STAR+ group. Second, there were no
systematic differences between the demographic and personality characteristics of the
first-time attenders of the STAR+ group and the characteristics of members of the STAR+
group who had previously attended a game during the year. In contrast, there were
differences between a combination of the two STAR+ subgroups and the PERSIST group.
These data suggest that the two games identified systematic differences between the
PERSIST and other groups, although data collected for additional games certainly would
provide a more precise definition for the attendance variable.

Related Literature

The sport consumption theory of particular interest in both studies was that of
Edwards (1973). Edwards contends that it is the similarity between the characteristics of
sporting events and individuals' everyday lives that explains why middle and upper
classes, males, and businessmen are more likely than other groups to exhibit an ongoing
interest in sport (e.g., McPherson, 1975). This similarity between sporting events and
these groups' everyday lives is described in terms of their uncertainty, lack of total control,
and competition for scarce values. Moreover, the contention is that when participants with
whom these groups identify are successful, the groups' values of hard work, discipline,
and, generally, the "American way of life" are reinforced. Another group noted by Edwards
is that has a high interest in sports is blacks because of "...the special significance of sports

Edwards' (1973) discussion of fan interest seems to focus on only major sport teams.
Thus, because these are mostly male teams, the higher interest of males in sports may
also be a function of the relative ease with which males can identify with the participants.
In addition, Edwards does not address the question about the particular teams that fans
choose to support. Sloan (1979) addresses this question by proposing that support for a
particular team is partly a function of a meaningful de facto association, that is, a fan being
a member of a well-defined group such as a school or community.
Findings from past research are consistent with Edward’s (1973) position. Sloan (1979) found more fan satisfaction following a game when the team with which fans identified had won than when the team had lost, and their satisfaction was particularly high when the game had been very competitive. Zillman, Sapolsky, and Bryant (1979) found more viewer satisfaction during a sporting event when the preferred participants were successful, and the satisfaction was particularly high when (a) the viewers identified with the participants, (b) the event was very competitive, and (c) the preferred participants exhibited dominating and aggressive actions. Schurr et al. (1985) reported that business majors, males, blacks, and/or individuals whose MBTI profiles indicated a preference for action—the MBTI sensing-type—were among student groups that were most likely to attend a college basketball game. Doyle, Lewis, and Malmisur (1980) found more males than females attending college football games, but they did not find higher attendance for blacks.

With regard to the students’ local residences and hometowns, Schurr et al. (1985) and McPherson (1975) reported that students living in university residence halls were more likely to attend university sporting events than students living in other types of residences, and Schurr et al. found that students whose hometowns were most distant from the university were more likely to attend basketball games than other students. Consistent with the theme that individuals form an identification with a sport team representing an institution with which they identify, Schurr et al. proposed that the strength of the students’ previous associations was less for students whose hometowns were most distant from the university than for other students, and that the former students had formed a greater identification with the university. Schurr et al. also proposed that the social environment found in university residence halls—encouragement for attending games—may have been a factor in the higher attendance of these students, as well as the close proximity of the halls to the arena. In part, the latter proposal was based on the observation that approximately 95% of the students ensured themselves of sitting with a friend by obtaining adjacent reserved seating tickets.

Method

Sample

The study was conducted at Ball State University, a state-supported NCAA Division IA school and a member of the Mid-American Athletic Conference. Over 90% of the university’s students are from Indiana, a state with a strong basketball tradition. The majority of students are middle class and their hometowns are evenly distributed in terms of type of community (Schurr et al., 1985). Seventy-six or 26% of the freshmen attenders used in STUDY 1 were no longer enrolled in the university. This percentage reflects the normal one-year freshman attrition rate at the university. The attenders used in both studies were 11% of the total sample used in STUDY 1 and 19% of the total sample used in the present study. The respective percentages for non-attenders are unknown as separate record.

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Personality

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Vocation

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Demographic

Two categ (SEX), race (F Local residence, campus reside
separate random samples were selected.

Students who attended the games were identified by recording their student numbers as they obtained reserved seating tickets. When tickets are obtained, the game number is marked on the student identification card. This procedure provided the means for identifying the first-time attenders of a game during the second year. Students are not charged for attending university sporting events. Thus, the cost consideration was not a factor that influenced student attendance.

**Personality Characteristics**

**MBTI.** The MBTI yields four dichotomies: (1) extraversion-introversion (E-I), social versus solitary settings are preferred; (2) intuitive-sensing (S-N), practical and action-oriented versus imaginative; (3) thinking-feeling (T-F), impersonal logic versus personal subjectivity is the major factor in judgments; and (4) judging-perceiving (J-P), preference for decisiveness versus flexibility in activities. The four temperaments that Keirsey and Bates (1978) derive from the S-N, T-F, and J-P scales are: (a) SJ - conformers, who are action-oriented with a commitment to traditional ways; (b) SP - non-conformers, who are action-oriented but who are less predictable and less committed to traditional ways than the SJs; (c) NT - competency-seekers, who are compelled to possess an understanding of the realities of nature; and (d) NF - self-actualizers, who endlessly search for meaning in interpersonal relationships.

**Vocational Orientation.** Two groupings of academic majors were used to identify the vocational orientation of students. The two groups were formed as the result of a preliminary analysis that yielded 4 of 12 initial groupings of majors for which the proportion of students attending a game was relatively high: (1) business, .62; (2) computer science-mathematics, .60; (3) physical education, .75; and (4) industrial technology-home economics, .54. The respective proportions found in STUDY 1 (in which all four academic classes were used) were .60, .64, .75, and .49. As a group, these majors are traditionally viewed as male vocational orientations, are applied in nature, and are chosen more often by action-oriented, practical MBTI sensing-types than intuitive-types (Schurr & Ruble, in press). For the present study, approximately 70% of the students in this group were business majors, and only about 16% of the students in the other three majors were seeking a teaching license, which for these latter majors is an alternative to the business world. This group was identified as having a "businesslike" vocational orientation (BUS+). The proportion of attenders in other majors (BUS-) (e.g., nursing, humanities, elementary education, and the behavioral, physical, and biological sciences) ranged from .38 to .46.

**Demographic Characteristics**

Two categories were used for the identification of students according to their gender (SEX), race (RACE), local residence (HALL), and distance from their hometown (DIS). Local residence was dichotomized into living in either a residence hall (HALL+) or off-campus residence (HALL-). The hometown variable was dichotomized into a student's
hometown being located in the same county as the university or an adjacent county (DIS+), or another location (DIS-).

Three categories had been used in STUDY 1 for the HALL and DIS variables: the HALL- group was divided into “walking” or “driving” distances, and the DIS+ group was divided into “same” or “adjacent” counties. It was necessary in the present study to reduce the number of categories for these variables because of the smaller overall sample size.

**Analyses**

Cross tabulations of the personality and demographic characteristics with the attendance variable, and a series of log-linear models (Bock, 1975; SPSS, Inc., 1983) for the cross tabulations, were used in the statistical treatment of the data. Game attendance was the criterion variable in the models, and SEX, HALL, DIS, RACE, vocational orientation (BUS), E-I, and three variables representing the Keirsey-Bates typology were used simultaneously as predictor variables. The three variables for the Keirsey-Bates typology were the S-N scale, the J-P scale for S-types (J-P/S), and the T-F scale for N-types (T-F/N).

The log-linear models were used to identify: (a) unique relationships between the predictors and the attendance variable, that is, main effects that were independent of effects of other predictors, and (b) two-way interactions among the predictors. Three-way and higher order interactions were not considered because of many cell frequencies being quite small or zero for combinations of three or more predictors. The presence of a significant interaction ($p < .05$) indicated that a relationship between a particular predictor and attendance had to be interpreted in conjunction with a second predictor. When interactions were not significant, they were omitted from another model in order to test the statistical significance of the main effects of the predictors.

Three separate and statistically independent series of analyses were performed for the attendance variable: comparisons of the ATT+ and ATT- groups, the PERSIST and OCC groups, and the STAR+ and STAR- groups.

The J-P/S and T-F/N variables were examined in two separate analyses: only S-types were used in the analysis of the J-P scale, and only N-types were used in the analysis of the T-F scale.

Proportions, odds of attendance, and odds ratios (Page, 1977) were used in the interpretation of the results. An odds ratio indicated how many more times likely it was that a particular group attended a game(s) than a complementary group. The odds ratio was computed by dividing the odds of attendance for the group by the odds of attendance for the complementary group.

**Results**

Three variables were identified in the analyses that were not statistically significant for explaining attendance of the sample at the games, either as main effects or in interaction with T-F.

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with other variables. These variables were E-I, the J-P scale for S-types (J-P/S), and the T-F scale for N-types (T-F/N). The absence of relationships for the E-I and T-F/N variables was consistent with the results of STUDY 1. In STUDY 1, however, an interaction was found between gender and the J-P/S variable: the male SJ proportion of attenders was higher than the male SP proportion, whereas the relationship was reversed for females. Thus, the evidence was inconsistent for the J-P/S variable.

The variable of RACE was statistically significant for explaining the difference between attenders and non-attenders (ATT+ vs. ATT-), but it was not significant for explaining either attendance at both games (PERSIST vs. OCC) or attendance at a particular game (STAR+ vs. STAR-). The effect of RACE was in the form of an interaction with SEX (z = 2.02, p < .04). The proportions for black and white male attenders were .65 and .60, yielding an odds ratio of 1.23 that favored attendance by black males. The proportions for black and white female attenders were .67 and .38, yielding an odds ratio of 3.28 that favored attendance by black females. In STUDY 1, the respective male proportions were .77 and .60, and the respective female proportions were .62 and .38. Essentially, the results of the two studies indicated that black-males, black-females, and white-males were about equally likely to attend games. The major discrepancy was for white-females who were not as likely to attend games as the three other groups.

The five remaining variables of HALL, DIS, SEX, BUS, and S-N were statistically significant for explaining more than one aspect of the sample's pattern of attendance at the games. All five of these variables were involved in at least one interaction. Interactions were found among the SEX, BUS, and S-N variables and between the HALL and DIS variables but not between variables of the two sets. The summary tables for these analyses display the joint distribution of the respective variables of the two sets.

Three summary tables are presented, one for each of the comparisons made for the attendance variable. Approximate proportions of the college population for combinations of the SEX, BUS, and S-N variables are shown in the tables. The proportions are based on data that were available for the entire sophomore class. Results for these three particular variables may have meaning beyond the college population.

**Attenders versus Non-attenders (ATT+ vs. ATT-)**

The analyses conducted for the ATT+ and ATT- groups yielded statistically significant results for an interaction between SEX and S-N (z = 2.30, p < .02), a main effect of BUS (z = 3.43, p < .001), and an interaction between HALL and DIS (z = 2.32, p < .02). Summary data for these analyses are shown in Table 1. Comparable data for the proportions obtained in STUDY 1 are shown in parentheses.

BUS. Students of the BUS+ group were more likely to attend games than students of the BUS- group. The odds ratio was 2.17, which indicated students with a "businesslike" vocational orientation were about two times more likely to attend games than other students.

SEX and S-N. Overall, males were more likely to attend games than females, an odds
Table 1

Summary Data for the Comparison of Attenders and Non-Attenders

<table>
<thead>
<tr>
<th>Group</th>
<th>POP PROP</th>
<th>n</th>
<th>ATT+ PROP</th>
<th>STUDY 1</th>
<th>ODDS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SEX, S-N, and BUS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>.43</td>
<td>515</td>
<td>.61</td>
<td>(.61)</td>
<td>1.56</td>
</tr>
<tr>
<td>BUS+</td>
<td>.21</td>
<td>276</td>
<td>.68</td>
<td>(.66)</td>
<td>2.13</td>
</tr>
<tr>
<td>S</td>
<td>.14</td>
<td>191</td>
<td>.73</td>
<td>2.70</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>.07</td>
<td>85</td>
<td>.56</td>
<td>1.72</td>
<td></td>
</tr>
<tr>
<td>BUS-</td>
<td>.22</td>
<td>239</td>
<td>.53</td>
<td>(.54)</td>
<td>1.13</td>
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<tr>
<td>S</td>
<td>.11</td>
<td>119</td>
<td>.62</td>
<td>1.63</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>.11</td>
<td>120</td>
<td>.44</td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>.57</td>
<td>521</td>
<td>.39</td>
<td>(.40)</td>
<td>.64</td>
</tr>
<tr>
<td>BUS+</td>
<td>.15</td>
<td>147</td>
<td>.49</td>
<td>(.45)</td>
<td>.96</td>
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<tr>
<td>S</td>
<td>.10</td>
<td>102</td>
<td>.50</td>
<td>1.00</td>
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<tr>
<td>N</td>
<td>.05</td>
<td>45</td>
<td>.44</td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td>BUS-</td>
<td>.42</td>
<td>374</td>
<td>.36</td>
<td>(.37)</td>
<td>.56</td>
</tr>
<tr>
<td>S</td>
<td>.23</td>
<td>210</td>
<td>.38</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>.19</td>
<td>164</td>
<td>.33</td>
<td>.49</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1.00</td>
<td>1036</td>
<td>.50</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

| **HALL and DIS** |          |     |           |         |      |
| HALL+         |          |     | .56       | (.62)   | 1.27 |
| DIS+          |          |     | .52       | (.54)   | 1.08 |
| DIS-          |          |     | .57       | (.63)   | 1.33 |
| HALL-         |          |     | .39       | (.37)   | .64  |
| DIS+          |          |     | .27       | (.21)   | .37  |
| DIS-          |          |     | .41       | (.46)   | .69  |
| Total         |          |     | .50       | 1.00    |      |

* Proportion in the sophomore class exhibiting the characteristics.

b Proportion of the sample who attended a game.

* Computed by dividing the proportion of attenders (ATT+) by the proportion of non-attenders (ATT-).
ratio of 2.44. Sensing-types were more likely to attend games than intuitive-types for both the male and female groups. The difference between the proportions, however, was greater for males than females, which was a source of the interaction. The S-N odds ratio was 2.21 for males, whereas it was 1.33 for females. Thus, being an action-oriented, practical sensing-type was more influential for the attendance of males than females.

**HALL and DIS.** Overall, HALL+ students were more likely to attend games than HALL-students, an odds ratio of 1.98. DIS- students were more likely to attend games than DIS+ students for both the HALL+ and HALL- groups. The difference between the proportions, however, was greater for the HALL- students than the HALL+ students, which was a source of the interaction. The DIS odds ratio was 1.86 for the HALL- students, whereas it was 1.23 for HALL+ students. Some of the DIS+ students living in off-campus residences (HALL-) were probably commuters and lived a further distance from the arena than most of the DIS- students living in off-campus residences, which is a factor that may have partially confounded the results. However, the results were consistent with those found in STUDY 1, which used a "walking distance" group that controlled for the distance of a local residence from the arena. It appears that the DIS+/HALL- status for students provides the basis for their prolonged identification with a local community and high school rather than their developing or previously having an allegiance to the university.

**Comparison to STUDY 1 results.** A comparison of the SEX, BUS, DIS, and HALL proportions obtained in the present study to the respective proportions obtained in STUDY 1 (shown in parentheses in Table 1) indicates that their magnitudes are markedly similar. Thus, the results of the two studies are very consistent for these variables, even though the studies differed with regard to the number of games used to define "attenders" and the number of academic classes represented in the samples. In addition, the relative magnitudes of the SEX and S-N proportions were similar for the two studies, although there was some deviation in their absolute magnitudes. In the present study, the male S and N proportions of attenders were .68 and .49, and the female S and N proportions were .42 and .35. The respective proportions found in STUDY 1 were .79, .57, .49, and .43.

**Comparison to population proportions.** A comparison of the proportions of attenders in the SEX, BUS, and S-N groups to the proportional representation of these groups in the college "population" reveals interesting information about the density of the groups and their likelihood of attending games. The largest female groups, BUS-/S and BUS-/N, were least likely to attend games, whereas the largest male group, BUS+/S, was most likely to attend games. Thus, the games were most appealing to the most populous male group and least appealing to the most populous female groups.

**Persistent Versus Occasional Attenders (PERSIST vs. OCC)**

The analyses conducted for the PERSIST and OCC groups yielded three statistically significant main effects: SEX (z = 3.96, p < .00+), S-N (z = 3.22, p < .00+), and HALL (z = 2.70, p < .01). Proportions attending both games were larger for males, sensing-types, and students living in residence halls. The odds ratios were 2.71 for SEX, 2.66 for S-N
Table 2
Summary Data for the Comparison of PERSIST and OCC Attenders

<table>
<thead>
<tr>
<th>Group</th>
<th>POP PROP(^a)</th>
<th>(n)</th>
<th>PERSIST PROP(^b)</th>
<th>ODDS(^c)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SEX, S-N, and BUS</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Male</td>
<td>.43</td>
<td>313</td>
<td>.21</td>
<td>.27</td>
</tr>
<tr>
<td>BUS+</td>
<td>.21</td>
<td>190</td>
<td>.22</td>
<td>.28</td>
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<tr>
<td>S</td>
<td>.14</td>
<td>143</td>
<td>.25</td>
<td>.33</td>
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<tr>
<td>N</td>
<td>.07</td>
<td>47</td>
<td>.11</td>
<td>.12</td>
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<tr>
<td>BUS-</td>
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<td>123</td>
<td>.19</td>
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<td>S</td>
<td>.11</td>
<td>69</td>
<td>.25</td>
<td>.33</td>
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<tr>
<td>N</td>
<td>.11</td>
<td>54</td>
<td>.11</td>
<td>.12</td>
</tr>
<tr>
<td>Female</td>
<td>.57</td>
<td>205</td>
<td>.09</td>
<td>.10</td>
</tr>
<tr>
<td>BUS+</td>
<td>.15</td>
<td>68</td>
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<td>.11</td>
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<td>S</td>
<td>.10</td>
<td>52</td>
<td>.11</td>
<td>.12</td>
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<tr>
<td>N</td>
<td>.05</td>
<td>16</td>
<td>.04</td>
<td>.04</td>
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<tr>
<td>BUS-</td>
<td>.42</td>
<td>137</td>
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<td>.09</td>
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<td>S</td>
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<td>N</td>
<td>.19</td>
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<td>518</td>
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<tr>
<td><strong>HALL and DIS</strong></td>
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<td>Total</td>
<td>518</td>
<td></td>
<td>.16</td>
<td>.19</td>
</tr>
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\(^a\) Proportion in the sophomore class exhibiting the characteristics.
\(^b\) Proportion of the sample who attended both games.
\(^c\) Computed by dividing the proportion of PERSIST attenders by the proportion of OCC attenders.
1.83 for HALL. The summary data are shown in Table 2.

The importance of these characteristics for identifying the persistent attenders was particularly evident in the actual number of students attending both games who exhibited the characteristics: 54 of 83 (65%) were male/sensing-types, 63 (76%) lived in residence halls, and 80 (96%) either were male/sensing-types or lived in residence halls. In other words, it was highly unlikely that students attended both games unless they were male and sensing-types or they lived in a residence hall.

Conceptually, it is important to note that for residence hall students the proportion of DIS- students attending both games was larger than the proportion of DIS+ students ($z = 2.20$, $p < .03$). The odds ratio was 2.86. This difference supports the notion that students from distant hometowns may have a more developed identification with the university and its team than other students who as previously noted seem to maintain a prolonged identification with a hometown and its team.

**STAR+ Versus STAR- Attendees**

The analyses conducted for the STAR+ and STAR- groups yielded a statistically significant main effect for HALL ($z = 4.03$, $p < .001$) and a significant interaction between SEX and BUS ($z = 2.34$, $p < .02$). The summary data are shown in Table 3.

HALL. The proportion of HALL+ students attending the STAR+ game was larger than the proportion of HALL- students. The odds ratio was 2.01. Thus, the presence of the “star” drew a disproportionately larger number of students from a group that already was inclined to attend games.

SEX and BUS. A source of the interaction between SEX and BUS was that the proportions of males and females attending the STAR+ game were equal for the BUS+ group, whereas the male proportion was larger than the female proportion for the BUS- group. The SEX odds ratios were 1.00 for the BUS+ group and 2.71 for the BUS- group. Essentially, these results indicated that the presence of the “star” did not draw a disproportionately larger number of students from the male and female BUS+ groups. In contrast, the presence of the “star” drew a disproportionately large number of male/BUS- students and a disproportionately small number of female/BUS- students. Considering that the male/BUS- group was male and the one-half of the group was comprised of sensing-types, which were two characteristics associated with generally attending games, the finding for this group may not be particularly important. What seems most important is that the presence of the “star” did not draw a disproportionately larger number of females from the BUS- group, which was the largest group in the student population and also the group least likely to generally attend games.

**Discussion**

Results for the comparison of attenders and non-attenders of the games generally supported Edwards’ (1973) and Sloan’s (1979) contentions about characteristics of direct
### Summary Data for the Comparison of STAR+ and STAR- Attendees

<table>
<thead>
<tr>
<th>Group</th>
<th>POP PROP&lt;sup&gt;a&lt;/sup&gt;</th>
<th>n</th>
<th>STAR+ PROP&lt;sup&gt;b&lt;/sup&gt;</th>
<th>ODDS&lt;sup&gt;c&lt;/sup&gt;</th>
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**HALL and DIS**

<table>
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<th>Group</th>
<th>311</th>
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<tbody>
<tr>
<td>HALL+</td>
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<tr>
<td>DIS+</td>
<td>261</td>
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<tr>
<td><strong>Total</strong></td>
<td>435</td>
<td>.71</td>
<td>2.43</td>
</tr>
</tbody>
</table>

<sup>a</sup>Proportion in the sophomore class exhibiting the characteristics.

<sup>b</sup>Proportion of the sample who attended only the STAR+ game.

<sup>c</sup>Computed by dividing the STAR+ proportion by the STAR- proportion.
sport consumers. The central theme underlying their contentions is that direct sport consumers identify with the institution represented by a team, the characteristics of the participants, and/or the characteristics of the sporting event—the social significance of the sport and/or the action, competition, and the definiteness of the outcome and the reward for successful performance.

If viewed from a "main effects" or simple additive model, the findings would support the theme in that, proportionately, attenders were more likely black, male, action-oriented, from one of the hometowns more distant from the university, and/or to have a "business-like" vocational orientation. Although such a description would be fairly accurate, the results indicated that a simple additive model including only these factors was incomplete for explaining the attendance behavior. First, convenience and social support were identified as important additional factors. Second, three interactions among the factors were identified.

The importance of convenience and social support was apparent in the high attendance of residence hall students. Residence halls were located nearer the arena than other residences, which might suggest that convenience was the only factor in the attendance of residence hall students. The social factor, however, was evident in that very few students (less than 5%) were alone when they obtained tickets. Most often, two or more students obtained reserved seating tickets at the same time, which would ensure their sitting together at a game. The groups of residence halls students obtaining tickets were relatively large, and it seems in terms of the sheer number of available students that residence hall students could more easily find someone else to attend a game or they would be encouraged by someone else to attend.

One of the interactions was between the local residence and hometown variables. This interaction suggested that convenience and/or social support might partially offset the importance of the identification factor for occasionally attending games. The location of students' hometowns was less important for residence hall students than other students. It may be that individuals will occasionally attend sporting events if it is not too inconvenient and they are encouraged to do so, even though they may not have formed a particularly strong identification with the sport or participants.

The other two interactions involved gender, one with race and one with the personality type measured by the MBTI (Myers, 1980) sensing-intuitive scale. The interaction with race indicated that black-females were as likely to attend games as black and white males, and it was the white-females who were the discrepant group. The interaction with the sensing-intuitive characteristic indicated that being a practical, action-oriented sensory-type was more important in the attendance of males than females. Both of these interactions are probably explained by the nature of the game being played and the participants. Basketball is a gender-typed masculine sport (Csizma, Wittig, & Schurr, in press), and it was being played by males of which the majority of the home team starters were black. Based on the identification theme, there were fewer attributes of the games that would appeal to white-females than would appeal to other groups, even if the white-
females were sensing-types, which was a personality characteristic clearly associated with the attendance of other groups. It would be interesting to examine the gender and race attendance at games when teams vary in racial composition, for example, either all black or all white. It also would be interesting to examine characteristics of attenders at female basketball games, particularly the sensing-intuitive preference and vocational orientation of the females attending the games. From observing the gender composition of crowds at the female games that preceded the male games, it was easy to ascertain that there were proportionately more females at these games than the male games.

The comparison of persistent and occasional attenders may have identified characteristics associated with being an ardent fan of sporting events that have attributes that are similar to those of male basketball games: being male and a practical, action-oriented sensing-type, identifying with an institution and its team, having social support for attending games, and/or living in a residence that is conveniently located to an arena. It was interesting to note that having a "businesslike" vocational orientation was not a factor in being a persistent attender. Edwards (1973) observed that the similarity between sporting events and the everyday lives of businessmen was a reason why they were fans, participated in booster groups, and so on. In part, it may be that what Edwards observed is that businessmen are more likely to be practical, action-oriented sensing-types rather than intuitive-types.

The assessment of the characteristics of attenders whose attendance may have been influenced by the presence of the "star" performer yielded two notable results. In general, the "star" did not draw a disproportionately larger number of students from groups who otherwise might not attend games. Second and most important, the "star" actually drew disproportionately fewer females from the "non-businesslike" vocational orientation group, a group that was generally less likely to attend games. This group broadly represented potential vocations that are traditionally viewed as being appropriate for females, a notion affirmed by 74% of the females in the "population" being enrolled in academic majors that were included in the group. From this perspective, it seems that the more traditional females did not particularly identify with characteristics of male basketball games, and the presence of an outstanding performer did not increase the attractiveness of the games. Overall, this group represented 42% of the total "population." An implication is that unless there is a prevailing influence of another factor such as being socially motivated, the group's lack of interest in such games may constrain total game attendance when the number of potential fans is limited in size.

In conclusion, the results from comparing the characteristics of attenders and non-attenders were remarkably similar to those reported in a previous study (Schurr et al., 1985). Although only one sport was studied, this consistency suggests that the characteristics identify relevant dimensions that may explain the attendance behavior for a variety of groups at a variety of sporting events. However, the particular relationships between the characteristics and attendance would probably vary according to such factors as the type of sport and the characteristics of the participants, for example, gender and race. The
assessment of the characteristics of persistent attenders and the attenders who ostensibly
were influenced by the presence of a "star" did not represent a replication of a previous
study, and a replication of the results would be desirable. Nevertheless, the characteristics
functioned to differentiate the groups, and the results were interpretable within the context
of the identification theme and the additional factors of convenience and social support.

References

McGraw-Hill.
Journal of Sport Psychology.
N. Ball & J. W. Loy (Eds.), Sport and social order: Contributions to the sociology of sport
Psychologists Press, Inc.
approach. Sociological Methods and Research, 5, 419-435.
Schurr, K. T., & Ruble, V. (In press). The Myers-Briggs type indicator and the second year
of college achievement: Survival and gravitation to appropriate and manageable fields.
Journal of Psychological Type.
characteristics of students attending and not attending a college basketball game.
Journal of Sport Behavior, 8, 181-194.
Sloan, L. R. (1979). The function and impact of sports for fans: A review of theory and
contemporary research. In J. H. Goldstein (Ed.), Sports, games and play: Social and
psychological viewpoints(pp. 219-262). Hillsdale, NJ: Lawrence Erlbaum Associates.
In J. H. Goldstein (Ed.). Sports, games and play: Social and psychological viewpoints