Sports in the Media: Perceptions of Athletic Behaviors and their Influence on Leisure

By

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As we enter the new millennium, obesity levels in the general population have risen to 20%, while public participation in various leisure activities—as consumers and audiences—continues to shift. A recent CDC survey, for instance, indicates that more than half of adults still don’t meet the government-recommended 30 minutes of moderate activity (e.g., playing sports) at least five days a week (Spors, 2003). As public participation in sports declines, media and other revenue streams for professional sports continue to rise, and the presence of a local professional sports franchise is even seen as a plus for civic pride (e.g., St. John, 1998). Putnam (1995) points to the decline of collective forms of participatory sports leisure, particularly bowling leagues, as symptomatic of a larger societal decline in civic life since the 1960s.

As these trends indicate, few areas of human activity have undergone as much change in recent years as public leisure allocations.¹ Even among more traditional households, sports or other group activities no longer provide the primary focus for audience leisure. Instead, people are spending more time with media than with any other waking activity, as new channels such as the Internet compete for a fixed pool of audience leisure time (e.g., Jeffres, Neuendorf, & Atkin, 2003).

Where only a generation ago, most people were served by newspapers, a monopoly phone company and three dominant television networks, audiences now select from a range of media competing to deliver voice, video and "compunication" services that shape our leisure. Even as media use accounts for increasing amounts of leisure time, for instance, newspaper reading continues to decline (e.g., Robinson & Zil, 1997). For that reason, it’s useful to investigate the link between media exposure, values and participatory as well as non-participatory forms of leisure. The present study examines
relationships between sports consumption, values and media use. In particular, we consider relationships between athletic/physical values, perceptions of their portrayal in the entertainment media, sports media use, athletic behaviors (attending events, playing sports), and general media use.

**Literature Review**

The literature on televised sport has developed rather unevenly from a number of disparate domains. Much of this work focuses on shifting perceptions of and audience tastes for various sports. For instance, baseball’s perennial status as the national pastime is undermined by recent public opinion data suggesting that only 67% of teenagers call themselves baseball fans, compared to 78% who call themselves football fans and 82% who call themselves basketball fans (St. John, 1998). Changing audience tastes in sports have no doubt been influenced by media coverage patterns, as when television coverage of professional football helped elevate the sport’s standing in the public consciousness during the 1950s and 1960s.

Commentators (e.g., Althiede & Snow, 1984) thus suggest that television exerts a new “media logic” that favors more action-oriented sports, while slower-paced sports have been relegated to secondary status. To wit, the Superbowl has replaced the World Series as the top-rated sportscast in recent decades, with individual telecasts of the football championship accounting for nearly half of the top 20-rated telecasts of all time (see Mullen & Mazzocco, 2000). This mediated sports “agenda setting” can work against minor sports, however. For instance, Tuggle (1997) found that ESPN’s *Sportcenter* and CNN’s *Sports Tonight* devoted about 5% of their time to women’s sports, with stories about women focusing on individual competition and almost no attention given to women’s team sports. Moreover, Hallmark and
Armstrong (1999) found that coverage of women’s games had fewer camera shots and graphics, used camera shots and graphics of longer duration, and took up significantly less broadcast time.

Gantz and Wenner (1991) examined gender differences in the audience’s experience of televised sports in a survey of Los Angeles and Indianapolis residents. Men responded more like fans, even when the analysis controlled for interest in watching TV sports and their favorite sport. Similarly, Perse (1992) found that attention to sports news was correlated with male gender. Abelman and Atkin (2002) discuss the ways in which networks factor these gender tastes into their programming strategies, as when CBS countered ABC’s Monday Night Football with a line-up of women’s oriented programs (e.g., Murphy Brown, Designing Women) during the 1990s.

Focusing on the consumption and influence of sports portrayals, Sullivan (1991) found that men enjoy player hostility more than women and fans were as likely to be affected by commentary as non-fans. Schweitzer, Zillman, Weaver and Luttrell (1992) discovered that fans of a losing football team were more pessimistic than fans of a winning team. Interest in sports programming has also been related to the need for stimulation in various contexts. Kremar and Greene (2000), for instance, found that exposure to contact sports on television was associated with and risk taking among adolescents age 11-22. And, in a study suggesting a link between this need for stimulation to new media adoption, Dupagne (1999) found that the intention to purchase HDTV was positively related to sports viewing. Similarly, Klopfenstein, Spears and Ferguson (1991) found that the longer a person owns a VCR, the more likely they are to record news as well as sports and other PBS specials.

Interest in sports remains as a motivation for television viewing according to research conducted in the uses and gratifications tradition. Walker (1990), for instance, looked at viewing
gratifications during the 1987 NFL players strike, finding that active viewing gratifications were related to strike saliency and post-strike viewing but passive gratifications were not. He found that social demographics mediate the influence of sports coverage; however, as race and support for unions were related to support for the players (and not for the owners). Jeffres, Neuendorf, Bracken, and Atkin (2003) note that interest in sports was related to a media use index (particularly newspaper reading) and use of new media (e.g., chat rooms, sports websites). The influence of media on actual selection of sports leisure activities, however, has received relatively little attention in the communication literature.

**The role of media in determining sports leisure allocations**

Past work (e.g., Tinsley & Tinsley, 1986) suggests that public allocations of time and money for various leisure pursuits may be determined, in part, by such dimensions as social locators. To that we can add other reciprocal factors, including non-media leisure and media and/or communication technology adoption and use. Given the dearth of work addressing the specific intersection of participatory, spectator and mediated sports options, the discussion below provides a review of literature for each of these relevant theoretical components.

As Jeffres et al. (2000) note, it's useful to focus on media for two reasons: (1) media themselves represent primary leisure activities, and (2) they can stimulate patronage of public leisure activities (e.g. radio promotion of a local sporting event). Leisure has been defined as an "attitude or state of mind in which the individual subjectively believes that he or she is pursuing an activity for personal idiosyncratic reasons rather than as a result of external coercion" (Tinsley & Tinsley, 1982, p. 105).
Communication behaviors can thus be viewed as "external factors affecting activities as well as leisure behaviors themselves" (Jeffres, Atkin, & Neuendorf, 1995, p. 69). Even so, not all media-use activities consistently fit the purposive dimensions associated with leisure (Tinsley & Tinsley, 1986). Leisure considerations may well determine media habits, especially given evidence of displacement of traditional mass media by newer media (e.g., Lin, 1992). The average consumer spends more time engaged with media than with any other activity except sleep, including roughly 4 hours a day with television--accounting for 40% of leisure time--along with 3 hours for radio and 30 minutes for newspapers (Robinson & Zil, 1997).

In theoretical terms, then, it's useful to conceptualize sports or other public culture and entertainment activities from the perspective of leisure studies, which assumes leisure choices are motivated by certain internal needs and motives (Jeffres et al., 2000). Following those intentions, audiences can fashion their own leisure selection and media use patterns for the purposes of fulfilling various expectations. In the realm of sports consumption, we might expect the selection of these activities to be driven by underlying values about physical fitness as well as the perceived portrayal of those values in media.

As Jeffres and Dobos (1995) found, the strength of leisure expectations is determined by one's quality assessment of various leisure domains. Only a handful of studies (e.g., Jeffres, et al., 1995, 2003) focus on the relations between non-media leisure activities and media exposure. Drawing from past work on media substitution (e.g., Henke & Donohue, 1989), we might expect that media will compete with non-media activities for audience leisure. These activities might also be competitive or orthogonal.
Work by Jeffres et al. (1995), for instance, suggests that TV viewing is a functional substitute for such activities as going on dates, spending time with family and the like.

The recent enrichment in the media environment, discussed earlier, has increased the significance of program options in the overall media consumption process (Jeffres et al., 1995; Lin, 1990; Rubin & Bantz, 1987; Williams, Phillips, & Lum, 1985). This expanded repertoire of media offerings (Reagan, Pinkleton, Chen, & Aaronson, 1995) may enhance the desirability media leisure activities, relative to other leisure options.

In one of the few media studies investigating corollary impacts of media on other leisure activities, Jeffres et al. (1995) found that TV viewing is a functional substitute for such activities as going on dates, spending time with family and the like. More recent work (Jeffres et al., 2003) reveals a positive relationship between time spent with media and with other leisure activities; that is, those who make greater use of media leisure are also more likely to be "busier" with non-media leisure activities. The only exception to that trend was TV viewing, leading the authors to conclude that it's a functional substitute for the diverse leisure activities that a community offers.

The choice of leisure activities might, itself, be influenced by the quality of various media and non-media leisure options. Our interest in sports related leisure encompasses such activities as going out to sporting events, playing sports, or patronizing sports programming. Based on the above theoretical framework, which draws from several bodies of interrelated literature, we posit that values of being physically fit, healthy, active and athletic will be related to participation in sports activities. More formally:

Hypothesis 1: Level of agreement with sports-related values (i.e., being physically fit, athletic and active) will be positively related to participation in sports related media and leisure activities.
Hypothesis 2: Perceptions of the prevalence of sports-related values in the media will be positively related to participation in sports related media and leisure activities

Although the media substitution hypothesis posits a competitive relationship between media and outside leisure options, these external social activities could also be stimulated by media promotions (e.g., for a 10K run). That is, in addition to serving as a competing leisure source, media are also an instrumental means to learning about the sports leisure opportunities available and how to find them. Since leisure has become such a significant component of both print and broadcast media, exposure to TV, newspapers and other media also could be linked to greater participation in these public leisure opportunities. We thus posit:

Hypothesis 3: The consumption levels of sports content across media modalities will be interrelated.

Only a handful of studies (e.g., Massey & Baran, 1990) focus on the relations between non-media leisure activities and media exposure. As Jeffres and Dobos (1995) note, the strength of people's leisure expectations is determined by one's quality assessment of various leisure domains and that depends on surveillance of the environment, including both media use and personal observation. Since past work provides no clear direction on the media v. non-media leisure dichotomy with sports, we pose the following research question:

RQ1: How is media exposure related to audience participation in sports activities?

Given that perceptions of sports programming and its influence can be shaped by social locators—along with and audience beliefs, interests and values—we pose the following research question:
RQ2: What is the relative influence of social locators, sports variables and media use on participation in sports-related media and leisure activities?

Methods

Study data are based on a telephone survey of respondents in a major Midwest metropolitan area interviewed during the Summer of 2001. Respondents were selected using traditional random-digit dialing techniques and a computer-aided telephone interviewing (CATI) system. The survey, presented as a general poll about current issues, contained items tapping respondent's opinions on a wide variety of items. The response rate was about 45 percent. Variables used in this paper, outlined in the Tables, were operationalized as follow:

Importance of Values—The key values for this study were imbedded in a list of 30 values rated in terms of their importance. Procedures followed those used by Tan et al. (1997) we asked respondents to use a 0 to 10 scale to “rate how important each of the following values are to you personally,” where “0 means it’s totally unimportant, 10 means it’s extremely important and 5 is neutral.” Single item measures included:

Importance and portrayal of several physical values—Respondents were asked to rate (0-10 scale) the importance of “being physically fit,” “being healthy,” and “being athletic,” and “being active.” These items were combined to form a “sports values held” index (alpha = .70). A companion set of measures assessed perceived portrayals of these values in the media, i.e., the “portrayal of being physically fit,” “portrayal of being healthy,” “portrayal of being athletic,” and “portrayal of being active” (alpha = .80).
Sports Variables—Several measures were constructed from measures of sports patronage and perceptions concerning the importance and portrayal of several physical values. The operationalizations were based on items used in other studies (see Author).

Sports Fan Index—Respondents were asked to indicate the frequency with which they “watch sports events on TV,” “listen to sports on talk radio,” “play sports,” and “how often do you attend sporting events” using a 0-10 scale (alpha = .72).

Knowledge of popular culture—Respondents were asked how much they agreed with the statements about celebrities in the news, the particulars of which are outlined in the Notes. 4

Media Use—Media use was measured using the standard set of items as well as several measures for the new technologies:

TV Viewing—Respondents were asked for the number of hours of television they watched “yesterday.” The scale ranged from 0 to 11 for more than ten hours.

TV News Viewing—Respondents were asked how often usually watch the news on television, several times a day, about once a day, 5 or 6 days a week, 3 or 4 days a week, 1 or 2 days a week, or less often than that.

Radio Listening—Respondents were asked how many hours they listened to the radio yesterday. Coding was done using the same scale used for television.

Newspaper Reading—Respondents were asked how many days last week they read a newspaper, and responses were coded from 0 to 7.

Magazine Reading—Respondents were asked how many different magazines they read regularly. Responses were coded into nine categories: 0, 1, 2, 3, 4, 5, 6 to 10, 11 to 20, and 21 or more.
Book Reading—Respondents were asked how many books they read in the past six months. Responses were coded into the same categories used for magazines.

Video Viewing—Respondents were asked how many borrowed or rented videos they watched in the past month. Responses were coded into the same categories used for magazines.

Film Viewing—Respondents were asked how many times they went out to see a movie in a theater in the past month. Responses were coded into the same categories used for magazines.

Media Use Index—Responses to the use of traditional media were standardized and the scores summed up for an index.

Computer Access—Respondents were asked if they had a personal or laptop computer in their household and responses were coded “yes” or “no.”

Internet Access—Respondents were asked if they had access to the Internet at home, at work, or both. Access was coded two ways, as a dummy variable where access anywhere = 1 and no access = 0; and as a continuum where access at both home and work = 2, access at either alone = 1, and no access = 0.

Internet Use—Respondents were asked if they had ever gone on the Internet. Those who said “yes” were asked how often they go on the Internet at work, using a 0-7 scale ranging from “several times a day” to “almost never.” They also were asked how often they go on the Internet at work using the same scale. Several variables were constructed: 1) a simple usage measure where 1=has gone on the Internet before, 0=”has never gone on the Internet;” 2) Internet access (access = 1); 3) Frequency use Internet at work (those without access = -1); 4) Frequency
use Internet at home (those without access = 1); 5) Overall Internet Use combining the scores for usage at home and work. 

*Media Website Use*—Respondents were asked how often they visited media websites such as one of the TV networks, a newspaper or radio site, using a 7-point scale ranging from almost never (1) to several times a day (7). Those not using the Internet were assigned a value of 0.

*Chat Room Use*—Respondents were asked if they had ever visited a chat room on the Internet to talk with people about something. Those who said “yes” were asked how often, using the following categories: every day (6), a couple times a week, about once a week, a couple times a month, less often than that (2). Those who had never visited a chat room before were assigned a 1 and those who had never gone on the Internet were assigned a 0.

*Social Categories*—Social categories were measured using commonly accepted items, including: marital status, the number of people in one’s household, age, level of formal education completed, ethnic or racial background, household income and gender. Dummy variables were constructed for being married, being white, being black, and being other race or ethnicity.

Pearson product-moment correlations were computed to examining the interrelationships among our various measures. Multiple regression analysis was then used to assess further the influence of our background variables on attendance to sports related media and leisure activities. The order of entry for predictor blocks in the prediction equation was (1) social locators, (2) the indices assessing respondent agreement with physical values as well as their perception of media portrayals of said
values, and (3) media exposure. Inspection of correlation analyses and V.I.F. indicators
reveals that multicollinearity is not a concern.

Results

Bivariate correlations between the media use variables and sports variables are outlined
in Table 1. The only value consistently related to all of the sports variables is, predictably, “being
athletic.” Similarly, the preponderance of relationships involving "being active" are positive,
albeit weaker in magnitude. The values of "being physically fit" and "being healthy" are
generally unrelated, however, to the dependent measures. On balance, then, these findings
provide mixed support for Hypothesis 1’s prediction that sports-related values held by audiences
will be related to their participation in sports-related media and leisure activities.

Since recognition of values in the media may be related to the sports variables, we tested
for relationships involving media use and sports-based leisure. Those who watch sports on
television are more likely to see three values portrayed in the entertainment media more
frequently—being physically fit, being athletic and being active. The latter two values are seen
as being more frequently portrayed by those who listen to sports talk radio. The Sports Fan
index is related to the values of “being athletic” and “being active.” Perceptions of the value of
"being healthy" are negatively correlated with knowledge of popular culture. On balance, these
findings provide mixed support for Hypothesis 2.

Focusing on media use, those watching sports on television more often also watch more
TV and more TV news. They also read the newspaper more often but read fewer books and
listen to the radio less often. Heavier users of sports talk radio show a similar pattern, but no
relationship is found with overall radio use. On balance, we see a fairly consistent pattern of
relationships involving sports and overall media use within the realm of traditional media, but
this does not extend to newer media (e.g., video and Internet adjuncts). This leaves Hypothesis 3—which predicted interrelationships in attendance to sports content across media—with only a modest level of support.

The larger relationship between media exposure and audience participation in sports leisure activities is queried in RQ1. Three of the four values (in an almost “rotating fashion”) are related to specific variables—watching sports on television, playing sports frequently, and the Sports Fan Index. Thus, those for whom being physically fit, being athletic and being active are important also engage in more sports-related behaviors (e.g., play sports more frequently). Only "being athletic" as a value is correlated with listening to sports talk radio. The sports values values generally are unrelated to knowledge of popular culture.

Finally, the Sports Fan Index is inversely related to book readership and positively related to newspaper readership and Internet use measures. The index tapping knowledge of popular culture is correlated with reading the newspaper, watching television, reading more magazines and visiting media websites more frequently. In particular, the number of significant relationships between the index and sports or traditional media use variables is little more than we would expect from chance alone, as only the Internet use variables demonstrate a consistent pattern of relationships with popular culture knowledge.

Per RQ2, a regression equation predicting participation in media and sports-related leisure is included in Table 2. The prediction model was able to explain 25% of the variance in sports media and leisure behaviors. Each of the predictor blocks—social locators, sports values, and media use variables—were significant predictors of sports-related media and leisure activities. Focusing on individual variables, age is an inverse predictor (B =
-22), as is female gender (B = -1.8). The index of sports-related variables held by the audience (i.e., health, activity, fitness, athleticism) is also a predictor (B = 0.15), as is the index gauging the perceived prevalence of those values in the media (although the latter is not statistically significant). Media use is a predictor of sports-related media activities, with news viewership (B = 0.135) and newspaper readership (B = 0.26) emerging as unique predictors. Book readership, however, is an inverse predictor (B = -0.20) of attendance to media and other sports leisure activities.

Discussion

The present study set out to examine the relationships between sports variables, values, media use and sports leisure allocations. We work from the assumption that a measure of personal utilities can be derived--across media and external sports leisure options--much like organizational measures of utility have been used in economics. Although there is no comprehensive measure of personal utility, we can obtain clues to the larger whole by aggregating a series of limited measures of leisure options, as presented here.

Our results generally disconfirm past work suggesting that the media are identified in a variety of research traditions as having negative effects on social capital, particularly when they crowd out participatory forms of leisure (e.g., social gatherings). But where media treatment of government was indicted for creating a “videomalaise” in the 1970s—replete with public disillusionment over government and declining civic involvement—the ubiquity of mediated sport does not encourage an “armchair malaise” amongst the would-be athletes surveyed here. Given that sports fandom is related to the importance of being healthy, athletic and physically fit, then the “passive” leisure allocations for sports viewing do not displace “active” leisure in the form of actual attendance to sporting events and programs. With regard to sports competition
generally, then, we see little support for Putnam’s (1995, 1996) metaphor of “bowling alone” amongst our sports fans. Differences in individual sports notwithstanding, individuals involved in such community activities as sporting events may realize the kinds of organizational ties that Putnam sees in decline of late. And to the extent that media generally encourage rather than displace such activities, as we’ve found with news media here, these outlets may actually encourage the formation of social capital, at least in the sporting realm. Consideration of competing media leisure outlets is critical, especially given the increased potential for audience activity presented by new video (in terms of viewing options, determining viewing schedules and controlling viewing conditions). As above, the positive relationships with internet or chat use and sports playing frequencies reinforces leisure conceptions stressing complementarity. This finding also contradicts stereotypical notions of bookish, nonathletic “computer nerds” who shun outside leisure in favor of virtual online communities (e.g., Lin & Atkin, 2002).

Researchers would be hard-pressed to demarcate these media use dynamics in an orthogonal fashion, as the functions of many communication technologies are converging rather than diverging. Since outside sports leisure is related to home entertainment, it reflects a close parallel of reasons for engaging in those activities. Past work (Jeffries et al., 1995; Lin, 1992) suggests that media use alone does not obviate other leisure activities nor generate social functions; perhaps additional utility-driven motives are a necessary catalyst for action. In the case of new media use, this expectation is similar to past findings, which show that both gratification and utility-driven motives determine leisure (e.g., Lin, 1992; Rosengren et al., 1995) and may dictate why audiences utilize technologies like the VCR for various purposes.
On balance, study results offer support for the hypothesis that one's leisure allocations for sports or media activities are related to sports-related values held by audience members (e.g., being athletic). However, since perception of the portrayals of those values does not predict sports-related media and leisure behaviors, media influences figure only in the margins. A devoted fan might, for instance, use newspapers, radio or even the Internet to follow a favorite team. But exposure to those media is not likely, in itself, a primary catalyst for sports fandom. The relationships uncovered between sports leisure and media uses are thus neither uniform nor compelling, although the patterns of influence discovered here suggest useful topics for later work. In particular, researchers might fruitfully explore the particular contexts of sports patronage in which media influences are central.

Across most of the film, video, magazine and radio modalities, the number of significant relationships with sports leisure were no greater than would be generated by chance alone. Television—favored by many as the dominant messenger of our time, is only a distant third to newspapers and the Internet in generating relationships with various sports leisure measures. That said, TV viewing generates one of the few negative relationships we observed with playing sports (r-.12), albeit the relationship is weak in magnitude. The lack of any consistent relationship involving TV and other forms of external sports leisure suggests that fragmented offerings may have reduced such effects, consistent with past work involving cultivation effects in the newer media environment (Perse, Ferguson, & McLeod, 1994).

Exploring other relationships involving mass media, it's interesting to note that newspaper readership is most strongly suggestive of sports leisure evaluations (with the
exception of actually playing sports). Linkages between reading and participating in
sports as a spectator, viewer or listener seem logical given that newspapers provide
information, and perhaps even stimulate interest, for local events that can enrich one's life
(e.g., block parties) (see Neuendorf et al., 2000).

Across our bivariate analyses, then, the fact that social categories were only
weakly related to sports leisure measures reinforces the need to move beyond
demographics and explore leisure and perhaps components of personal happiness (e.g.,
Jeffres et al., 2000). The youthful male profile of sports fandom uncovered here seems
consistent with past work, as the pursuit of this demographic continues to push television
bidding wars for sporting events (Abelman & Atkin, 2002). On balance, study results
offer mixed support for the notion that participation in sports leisure activities is a
function of to media use and values related to sport. However, while the magnitude of
these relationships is not comprehensive, the large role played by underlying values in
relation to sports reinforces the need to conceptualize audience leisure preferences in a
larger domain considering the influence of sports leisure value and image assessments in
several realms.

Thus, it will be important to repeat this research over time as new leisure options come
online. In particular, later work should address the relative popularity of media leisure activities
as specialized voice, video and data services become available on the emerging information grid.
A better understanding of content-specific uses and gratifications associated with those services
should also help complete the picture on audience leisure activities over time. In particular, we
need to develop more sensitive sports and other leisure measures to reflect variations in the
context of a given activity (e.g., content-specific measures of print or online media). Given the
positive relationships involving Internet use and sports participation uncovered here, scholars need to consider the ongoing changes presented by the new media environment—particularly involving electronic media like the Internet—and how they enhance the utility of media pursuits in various domains.
References


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<td>Freq. visits media websites</td>
<td>.08</td>
<td>.11#</td>
<td>.18*</td>
<td>.28***</td>
</tr>
</tbody>
</table>

Note: The first row represents the bivariate correlations between the media use variables and sports variables based on a sample size deviating slightly from 300. The second row represents partial correlations controlling for social categories: gender, three ethnicity dummy variables (white, black, other ethnic), age, married marital status, number in household, education and household income; partial correlations vary slightly from 270.
<table>
<thead>
<tr>
<th>Social Locators</th>
<th>Final B</th>
<th>R2 Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.220*</td>
<td>.101</td>
<td>6.680</td>
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<tr>
<td>Education</td>
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<td>Income</td>
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<tr>
<td>Gender (male)</td>
<td>-.176*</td>
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<tr>
<td>Sports Variables</td>
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<td>.040</td>
<td>5.450</td>
<td>.005</td>
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<td>Sports Values Held</td>
<td>.145*</td>
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<tr>
<td>Sports Values Portrayed</td>
<td>.096</td>
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<tr>
<td>Media Use</td>
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<td>3.677</td>
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<td>Television Use</td>
<td>.036</td>
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<tr>
<td>News Viewership</td>
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<td>Radio</td>
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<td>Newspaper Readership</td>
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<td>Magazine Readership</td>
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<tr>
<td>Book Readership</td>
<td>-.020*</td>
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<tr>
<td>Video Viewership</td>
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<td>Film Viewership</td>
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<td>Computer Use</td>
<td>.025</td>
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</tbody>
</table>

Total Model:

\[ R^2 = .25 \]

\[ \text{Adj. } R^2 = .20 \]

\[ F (15, 227) = 5.044 \]

\[ p < .001 \]

*Beta significant at p<.05
Endnotes

1 Putnam recounts that in 1975, for instance, 236,000 single women with children under 18 were working in the U.S., according to the Bureau of Labor Statistics. By the late 1980s, that number had quadrupled.

2 Those authors note that men have the greatest amount of free time when they’re at the youngest and oldest ends of the age scale (encompassing ages 18-29 and 65-69). Moreover, media behaviors take a larger share of leisure time at the top of the age ladder, where men and women aged 60-65 spend 63% and 50% of their free time with mass media, respectively.

3 A random sample of phone numbers was drawn from the metropolitan telephone book. Then the last two digits were randomly assigned using a random numbers table.

4 Items on popular culture included the following: "Can you tell me which of the following is the co-host of the Howard Stern Show on the radio?" (choices included Robin Williams, Robin Givins, Robin Swoboda, and Robin Quivers [correct]); "Last year the first Survivor program on TV was staged on an island in the Pacific. The most recent Survivor was played out in Australia. Which of the following was the million dollar winner in the first Survivor program?" (Rudy Boesch, Tina Wesson, Richard Hatch [correct], Colby Donaldson; "In the popular musical group TLC, what does TLC stand for?" (Tender Loving Care, T-Boz, Left Eye, & Chilli [correct]; Tina, Lolita & Carlota, T-Red, Lita, & Candy; "A recent movie being filmed in the ...area is set in which of the following neighborhoods?" (local neighborhoods listed); "Which of the following recently won the Tony award for the best musical on Broadway?" (The Lion King, The Producers, The Full Monty, The Rocky Horror Show). Correct answers were summed to form a popular culture knowledge index.