VOLUME 6 ISSUE 3

Journal of
Sports Management and Commercialization

Overrating Bruins, Underrating Badgers

Media, Bias, and College Basketball

DANIEL N. HAWKINS, ANDREW M. LINDNER, RYAN LARSON, AND JONATHAN B. SANTO

COMMON GROUND

SPORTANDSOCIETY.COM

JOURNAL OF SPORTS MANAGEMENT AND COMMERCIALIZATION
www.sportandsociety.com

First published in 2015 in Champaign, Illinois, USA
by Common Ground Publishing LLC
www.commongroundpublishing.com

ISSN: 2381-6937

Journal of Sports Management and Commercialization is peer-reviewed, supported by rigorous processes of criterion-referenced article ranking and qualitative commentary, ensuring that only intellectual work of the greatest substance and highest significance is published.

Overrating Bruins, Underrating Badgers: Media, Bias, and College Basketball

Daniel N. Hawkins, University of Nebraska Omaha, USA
Andrew M. Lindner, Skidmore College, USA
Ryan Larson, University of Minnesota, USA
Jonathan B. Santo, University of Nebraska Omaha, USA

Abstract: Why are some teams perennial darlings of sports journalists while other talented squads get overlooked? Each week during the NCAA basketball season, the Associated Press releases a ranked poll of the top 25 teams. By comparing the preseason and postseason rankings, we construct a measure of how much sports journalists who respond to the poll overrate (or underrate) college teams relative to their actual performance. Using this metric for the 115 NCAA schools that have appeared at least once in the opening or final AP poll in the last 25 years, we examine a range of institutional characteristics that may predict overrating or underrating by members of the sports media. A multilevel analysis reveals that recent performance in the NCAA tournament and the perceived quality of the most recent recruiting class are the strongest predictors of being consistently overrated. While no institutional characteristics had direct effects, the effect of tournament performance on overrating is greater for teams that have historically had fewer coaches and compete in a "power" conference, and for national research institutions with larger student bodies. Our findings have implications for understanding how complex decisions are made within a conservative social institution (the media) and suggest that some schools may receive advantages in media exposure and financial opportunity.

Keywords: Basketball, Bias, Colleges, Journalism, Media, Rankings, Sociology

Introduction

Pre game debates about which team is better, who's going to win, and by how much are surely as old as sport itself. However, in the post-ESPN era of the past 35 years, judging teams and predicting where they will end up by season's end has grown into sizable industry. The unending debate about which squad is "the team to beat" is played out in newspaper column inches, blog posts, and TV roundtable shows. For fans, these debates offer another layer of entertainment between games. But for sports journalists, assessing a large number of teams—before, during, and after the season—is a complex task, requiring them to consider stat sheets, scouting reports, past performances, etc. Awash in data, what mental shortcuts, assumptions, and forms of conventional wisdom do sports journalists use that might bias their assessments of teams in one way or another?

In this study, we use data from the Associated Press's (AP) weekly ranked poll of the top 25 NCAA men's basketball teams to examine patterns in sports journalists' assessments of college teams. By comparing preseason and postseason rankings for the 115 NCAA teams that have appeared in the AP poll at least once in the last 25 years, we ask: are certain college basketball programs consistently overrated or underrated by the media at the beginning of the season relative to the end of the season? Next, we examine whether the team's performances in past seasons or other characteristics of the institution are related to the media's overrating or underrating college basketball programs. These findings allow us to better understand how sports journalists make sense of a complex field of teams, but also reveal which types of college teams are systematically overrated or underrated.

Journal of Sports Management and Commercialization
Volume 6, Issue 3, 2015, www.sportandsociety.com, ISSN 2381-6937

Literature Review

The AP college rankings started in 1936, with a within-season ranking of college football teams in the interest of awarding national titles upon completion of the season (Associated Press, 2015b). The preseason poll, a prognostic ranking taking place before the season, was not introduced until 1950 (Ellis 2013). On January 20th, 1949, the AP began its seasonal ranking of men's college basketball programs (which, unlike the football ranking, does not play a direct role in determining postseason play). From the poll's inception until 1961 the AP only ranked the top 20 teams, and from 1962 to 1967 a maximum of 10 teams were ranked (College Poll Archive 2015). The poll subsequently returned to a 20 team ranking structure from 1968 to 1988, before expanding to the current 25 teams in 1989 (Associated Press 2015a).

The ranking methodology of the AP Basketball Poll, unlike other procedures (Sagarin, 2015), is relatively straightforward. Sixty-five voters submit their individual ranking of the top 25 teams each week before and during the season. These voters consist of media members covering college basketball for both national (e.g. ESPN, NPR) and local outlets (e.g. The Gainesville Sun, New Haven Register), although the majority are locally based sports journalists (Associated Press 2015c). The ballots are scored by giving 25 points to first place votes, 24 points for second place votes, and so on through one point for a 25th place vote. The scores are then summed within teams, which gives the AP its weekly basketball rankings.

The preseason ranking, then, represents the collective best guess of the sports press about which teams will be the most successful in the upcoming season. The final ranking, informed by a full slate of games, is a good indicator of how teams actually performed during the regular season. Inside the locker room of any one team, there may be numerous changes that make the team a different one in March than it was in November. Players build chemistry or sustain injuries, develop greater confidence or face self-doubt. But in the aggregate, these ups and downs over the course of season are a wash and most basketball programs end up with more or less the team that started the season. As a result, in comparing the preseason and postseason rankings, we get a sense of how accurate the wisdom of the sports reporter crowd is in predicting which teams turn out to be winners.

Following the Pack

Since NCAA rankings are produced by aggregating the votes of sports journalists, it is important to consider the ways in which sports reporters structure their work and make sense of a steady stream of scores, scouting reports, and almost daily mini-controversies. While sociologists and media scholars have extensively documented the journalistic production process more generally, sports reporting is a desperately understudied area (Boyle, Rowe, and Whannel 2010). As Wanta (2013) has observed, "Sports has long been one of the most highly read sections of the newspaper … [but it often] called the *toy department* of newspapers" (76-77). Perhaps because sports are not seen as serious news, the production of sports reporting is a vastly under-studied, under-theorized area (Wanta 2013; Silk and Amis 2000; Silk, Slack, and Amis 2000). However, by drawing together existing research on journalistic practice and the small number of studies on sports reporters, we can begin to understand the way in which sports journalism is structured and some of the key assumptions of workers in the field.

Contrary to many cinematic portrayals of enterprising muckrakers, ethnographic studies of newsrooms have consistently shown that journalists' work is highly routinized, constrained by editors' definitions of types of information that are "newsworthy," and structured into the specialized world of "beats" (Gans 1979; Tuchman 1978; Harrison 2006; Klinenberg 2005). One way reporters' work is shaped is by the division of news production into "beats" (Tuchman 1978). For Tuchman, assigning journalists to beats based on geographic locations (e.g., neighborhoods), specific organizations (e.g., the mayor's office), and particular topics (e.g.,

sports) is means of generating news and pulling it into a centralized "news net." For journalists, these beats become a social setting and imply a set of social relationships with other actors within that setting (Fishman 1980).

As with other "beat" reporters, sports journalists grow accustomed to routine reliance on particular sources. McCleneghan (1997) surveyed 215 sports columnists in cities over 100,000, finding that rank their own "intuitive feelings" and assessments of sporting events as most important to their evaluations. However, after their own impressions, the columnists ranked athletes and fellow colleagues as the most important sources for forming opinions. The next set of sources in importance were "official sources" like coaches, team management, and sports information directors, which were far more influential than unofficial sources like fans' opinions and talk show call-ins (although the "official source" of sports agents were ranked lowest of all, below even "strangers with tips"). The clear implication of these findings is that beyond their own reflections, sports journalists form opinions in consultation with other reporters and through interviews with official sources.

As a result, sports journalists often adopt what Coakley (2007) refers to as a "pack mentality," sharing "conventional wisdom" about team quality, players' ability, and locker room chemistry. This kind of consensus and routine-thinking help explain the well-documented tendency of sports reporters towards clichés (Wanta and Leggett 1988). With the introduction of online social media, like Twitter, which allow for continuous interactions among athletes and sports reporters throughout the day, the "echochamber effect" may be even more severe. As Hutchins (2011) writes, "the speed and sheer amount of tweets…makes it difficult to follow their content without sacrificing time that can be spent completing other journalistic tasks" (246).

Given this bias toward the "pack mentality," we would expect to find that some college basketball programs are reliably overrated and some consistently underrated. To be sure, some colleges and universities do consistently have better teams. The University of Kentucky's team tends to be rated highly because the Wildcats are an excellent team in most years. However, by using a difference score (between preseason and postseason rank), the current study explores not whether some teams are usually ranked highly (which is certainly true), but whether the field of sports journalists who vote in the poll misjudge certain teams in a systematic fashion.

How Sports Reporters Assess Teams

If, indeed, sports journalists' assessments of teams are systematically biased, what are some of the shared assumptions that drive these persistent misjudgments?

One possibility is an *establishment bias*. Among the most firmly held principles, especially in American media, is the "objectivity norm" or the belief that reporting ought to be sanitized of all opinion. Shoemaker and Reese (1995) argue that the commitment to objectivity today reflects a defensive posture against charges of "media bias." Sports reporters are allowed more room to assert opinions than, say, political reporters. Still, being perceived as "objective" and not a "fan" is essential for any sports journalist hoping to establish credibility. Safe, conservative assertions that historically successful teams will perform well may seem less like advocacy than suggesting that unestablished team will thrive. For this reason, teams in elite conferences, those with a longstanding coach, and those with a historical record of success in the NCAA tournament might benefit from an *establishment bias* in the eyes of journalists, leading to overrating in the AP poll.

Looming large in NCAA basketball's calendar is the annual tournament and its associated seasonal malady, March Madness. Another possible source of overrating in the AP poll is due to a *recency bias* in response to the results of the previous year's tournament. The work of sports reporters has been radically transformed by the growth of the "sports-media complex" (Jhally 1984). Perhaps unsurprisingly, as early as the late 1980s, several studies demonstrated the way in which television coverage of sporting events aim to create "spectacle" by constructing powerful narratives around the teams and players in order to boost ratings (MacNeill 1996; Gruneau 1989).

McNeill (1996), for example, examined how CTV (Canada) used the 1988 Winter Olympics in Calgary to engage in "power plays for ratings, profit, and cultural significance in a competitive North American broadcasting industry" (104). In fact, "great festivals of sports," like the Olympics and the World Cup internationally and the World Series, Super Bowl, the NBA Playoffs, and March Madness in the U.S., have become exceedingly common (Carrington 2004). These great spectacles assume a larger position in our collective memory and the vivid memory of recent success may lead sports reporters to overrate the team's prospects for the new season. If teams' performance in the previous year's NCAA tournament is strongly associated with overrating in the AP poll, it would be strong evidence of a *recency bias*.

Like other journalists, sports reporters' work is driven by an immediate sense of what is "newsworthy." Past research shows that sports coverage tends to emphasize "hot" players—those currently enjoying success or that otherwise have compelling narratives. Fortunato (2008) argues that the NFL has consciously structured its programming schedule and press conferences to guide sports reporters toward covering particularly successful and appealing players. Analyses of sports coverage have long shown that even in team sports, journalists tend to focus on individual athletes (Williams 1977; Duncan and Brummett 1987). As a consequence, we would suspect that sports journalists would overestimate the contribution of new star recruits. Such an effect is a form of *star bias*.

There may also be forms of *institutional bias* associated with characteristics of the college or university itself. Whether the institution is a national or regional university or a liberal arts college may well affect its media visibility. Sports journalists might also discount basketball programs at colleges and regional universities as lacking the resources to be effective competitors. Institutional factors such as the size of the student body, the size of the metro area where the school is located, and the region of the country may affect journalists' assessments. Media outlets tend to be located in urban areas and especially concentrated in the Northeast. Consequently, there may be a navel-gazing effect with journalists being biased toward the hometown team. If observed, all of these effects would be a type of *institutional bias*.

We might also ask whether the *recency bias* is particularly strong for certain types of institutions. Perhaps college teams that typically suffer at the hand of the *establishment* or *institutional biases* gain special benefit from the *recency bias*. For example, if teams from non-power conferences are generally discounted by journalists, it is possible that a deep run in the tournament might particularly boost their reputation in the minds of the sports press. The current study examines this issue by modeling interactions between the previous year's tournament performance and the number of all-time Final Four appearances, the number of recent coaches, membership in a power conference, type of college or university, size of the student and metropolitan area populations, and geographic region of the country. Such effects would be interactions between the *recency* and *institutional or establishment biases*.

By examining patterns of overrating and underrating in the AP poll of the top 25 NCAA basketball teams, this study allows us to observe forms of bias built into contemporary sports journalism. The stakes here may be low compared to claims of bias in political reporting. Still, evidence of the *establishment* and *institutional biases* would suggest a self-reproducing cycle of boosterism for perennial favorites, while documented *recency* and *star biases* would indicate a tendency toward faddish reporting over more serious assessment. Such patterns may not only mislead fans, but also underrepresent plucky teams, playing great basketball, that deserve coverage.

Methods

The data set for this study was created using a variety of sources, which are detailed below in the description of variables. The first step was to compile all the NCAA Division I teams that were ranked in at least one preseason or postseason Associated Press basketball poll in the 25 seasons

between 1989-90 and 2013-14. This resulted in 115 unique college basketball teams and 2875 (25 x 115) team-seasons. The preseason poll generally comes out in mid-November before any regular season (i.e., non-exhibition) games are played, and the postseason poll is issued in mid-March before the conference and championship tournaments (e.g., NCAA, NIT, etc.) begin (College Poll Archive, 2015). The 1989-90 season was the first year the AP basketball poll expanded to 25 teams (Associated Press, 2015a), which presented a logical starting point for examining the data.

Variables

The dependent variable (*rank difference*) was calculated by subtracting each team's postseason rank from its preseason rank for all of 25 years of polling data (College Poll Archive 2015). Therefore, positive scores on the dependent variable indicate that a team *improved* its poll rank over the course of the season, while negative scores represent a *decline* in rank. In any given poll, only 25 teams are ranked, so the remaining 90 teams were assigned scores of "26" to allow for the calculation of rank difference for every team in every year. This strategy actually provides for the most conservative estimate of change in polling rank because it allows every unranked team to be slotted just outside the official poll with a "rank" of 26.

Like the outcome, two of the independent variables, *tournament performance* and *recruiting rank*, were measured at the season level (n = 2875). Tournament performance was an ordinal variable that assessed how far teams advanced in the *prior year's* NCAA basketball tournament (HoopsTournament.Net 2015). It ranged from 0 = *did not play in the tournament* to 7 = *won a national championship*, increasing by a point for each additional round a team progressed in the tournament (e.g., 1 = *played but lost in the first round* and 6 = *played but lost in the championship game*). Data on recruiting rank was taken from the Rivals news service (Rivals.com 2015), which provides comprehensive coverage of men's college football and basketball recruiting developments. Rivals generates ranked lists of the perceived quality of both individual recruits and the incoming classes of individual teams; here, we relied on the team rankings, which listed what Rivals considered to be the best 25 incoming classes for each year from 2003-04 to 2013-14. Recruiting data were not available before 2003, but this does not change the effective sample size for the analyses; since recruiting rank was added as a fixed effect (see analytic strategy below), we used the aggregated association within team from all available recruiting rank data across all of years.

The remaining independent variables were measured at the team level (n = 115). *All-time Final Four appearances* was tabulated as the number of times in history a team reached the national semifinals of the NCAA tournament dating back to the first tournament held in 1939 through the most recent tournament in the data set in 2014 (HoopsTournament.Net 2015). The *number of coaches* a team had during the study years (1989-2014) was gathered from school athletics websites and newspaper reports. Schools that were members of the traditionally influential Atlantic Coast, Big 12, Big Ten, Pacific-12, or Southeastern conferences were designated as *power conference* teams (Bennett 2014). The designation of a school as a *regional university*, *liberal arts college,* or *national university* was taken from the categories published by U.S. News & World Report (2015) in their "Best Colleges" list. The *student population* was measured using the combined number of undergraduate and graduate students at each campus gathered from school websites. The *metro area population* in which the school was located was taken from the 2010 U.S. Census (United States Census Bureau 2015b). The region (*Midwest*, *South*, *West*, or *Northeast*) in which the school was located was determined using the U.S. Census's basic geographic grouping of states (United States Census Bureau 2015a).

Analytic Strategy

To address the question of whether there was a consistent "mismatch" between preseason and postseason rankings over time, and to identify which teams were most likely to be overrated or underrated, we first provided an average difference between preseason and postseason rank for all 115 teams across all 25 years of study data. We subtracted postseason rank from preseason rank so that positive changes in rank difference represented teams who *overachieved* relative to preseason expectations (i.e., were *underrated*). In subsequent analyses, we transformed the simple rank difference by dividing it by 25 (i.e., a positive .04-point change in rank difference is equivalent to moving up one spot in the poll). This transformation reduced the likelihood of modeling problems in the regression analyses (described below), but did not affect the substantive interpretation of the effects. Recruiting rank was similarly reversed and transformed for consistency (i.e., a score of 1.00 was equivalent to the top-ranked class that year, while .96 represented the second ranked team, .04 represented the 25th ranked team, and a score of .00 was given to all unranked teams). In the next two steps, we then provided the mean, range, and standard deviation for each variable, as well as the bivariate correlations among all the variables, to further describe our data.

The final step in the analysis was a multivariate regression to ascertain which predictors had significant independent effects on the outcome in the presence of all other independent variables. The structure of the data was multilevel in nature, with seasons (Level 1; n = 2875) "nested" within teams (Level 2; n = 115), so we relied on a two-level analysis using HLM 7.00 (Raudenbusch, Bryk, and Congdon 2011). We first began with an unconditional model to assess the overall amount of variance in the dependent variable at each level of analysis (not shown). The first regression model included all the independent variables (at Level 1 and Level 2) in the model simultaneously. In subsequent models, we tested cross-level interactions to determine whether the slope of tournament performance (Level 1) was moderated by any of the Level 2 variables (i.e., the slopes for tournament performance were modeled as random effects). To keep our models parsimonious, we did not test cross-level interactions between the other Level 1 variable (recruiting rank) and the Level 2 predictors, as we did not have strong *a priori* hypotheses regarding the potential interaction effects of recruiting rank (i.e., the slopes for recruiting rank were modeled as fixed effects).

Results

Table 1 orders all 115 teams in the study by the average difference between their preseason and postseason rank across 25 years of AP polls (1990-2014). Because average rank differences were calculated by subtracting postseason rank from preseason rank, positive scores represent teams that *improved* their ranking over the course of the season. In other words, the more positive the scores, the more *underrated* the teams were. In contrast, as scores become increasingly negative, teams were more *overrated* over the course of the 25 years of study data. For example, the Wisconsin Badgers were the most underrated team in the study, improving their ranking by an average of 2.40 spots from the preseason to the postseason poll. At the other end of the table, the UCLA Bruins were the most overrated team, finishing 4.28 points lower, on average, in the final poll compared to where they ranked before the season began. Teams in the middle of table, such as Syracuse and Mississippi State, tended to be "properly rated" by the voters, with little or no difference on average between their preseason and postseason rankings. Overall, the table indicates there is a tendency to consistently overrate some teams and underrate others, although the actual level of mismatch between preseason and postseason rankings could be characterized as modest.

Table 1: Average Difference between Preseason and Postseason AP Poll Rank (1990-2014)

1. Wisconsin	2.40	40. Western Kentucky	0.48	78. Oregon	-0.16
2. Purdue	2.24	41. Nevada	0.44	79. Virginia Tech	-0.20
3. Cincinnati	2.16	42. TCU	0.40	80. Baylor	-0.20
4. Ohio State	2.08	43. Southern Illinois	0.40	81. Charlotte	-0.24
5. Iowa State	1.92	44. Villanova	0.40	82. Texas A&M	-0.28
6. New Mexico	1.88	45. East Tennessee St.	0.36	83. Rhode Island	-0.32
7. Wake Forest	1.60	46. New Orleans	0.36	84. Tulane	-0.36
8. Miami (FL)	1.40	47. Xavier (OH)	0.36	85. Georgia	-0.36
9. San Diego State	1.20	48. Utah State	0.32	86. VCU	-0.40
10. Florida State	1.12	49. Penn State	0.32	87. Virginia	-0.40
11. Princeton (NJ)	1.04	50. Tulsa	0.28	88. Missouri	-0.44
12. BYU	1.00	51. Pittsburgh	0.28	89. Seton Hall (NJ)	-0.52
13. Gonzaga	1.00	52. Loyola Mary. (CA)	0.20	90. Illinois	-0.52
14. Mississippi	0.88	53. Providence	0.20	91. DePaul (IL)	-0.60
15. Wichita State	0.88	54. Dayton	0.20	92. Connecticut	-0.76
16. St. John's (NY)	0.88	55. Oregon State	0.16	93. Texas	-0.88
17. Massachusetts	0.84	56. Pacific	0.16	94. Georgia Tech	-0.92
18. Kansas	0.84	57. Winthrop	0.16	95. Arkansas	-0.96
19. Coll. of Charleston (SC)	0.80	58. Arizona State	0.16	96. Fresno State	-1.00
20. Texas Tech	0.80	59. USC	0.16	97. Duke	-1.00
21. Nebraska	0.72	60. George Wash. (DC)	0.12	98. California	-1.04
22. Marquette	0.72	61. Minnesota	0.12	99. NC State	-1.20
23. Utah	0.72	62. Colorado	0.08	100. Tennessee	-1.20
24. UNLV	0.68	63. Richmond	0.08	101. Louisville	-1.28
25. Oklahoma State	0.68	64. St. Mary's (CA)	0.08	102. LSU	-1.48
26. Oklahoma	0.68	65. Washington State	0.08	103. Iowa	-1.56
27. St. Louis	0.64	66. Auburn	0.08	104. Temple	-1.56
28. South Carolina	0.64	67. Hawaii	0.04	105. Memphis	-1.56
29. Stanford	0.64	68. UAB	0.04	106. Georgetown	-1.56
30. New Mexico State	0.60	69. Maryland	0.04	107. Arizona	-1.56
31. Murray State (KY)	0.60	70. Mississippi State	0.00	108. Florida	-1.64
32. Butler	0.60	71. Syracuse	0.00	109. Michigan	-1.80
33. Creighton	0.60	72. Southern Miss	-0.04	110. Alabama	-1.80
34. Vanderbilt	0.60	73. West Virginia	-0.08	111. Kentucky	-1.92
35. La Salle (PA)	0.56	74. Clemson	-0.08	112. Indiana	-2.00
36. St. Joseph's (PA)	0.56	75. Notre Dame	-0.08	113. Michigan State	-3.04
37. Boston College	0.56	76. Davidson	-0.12	114. North Carolina	-3.68
38. Kansas State	0.56	77. Washington	-0.16	115. UCLA	-4.28
39. Drake	0.48				

Note: Average rank differences were calculated by subtracting postseason rank from preseason rank, so that positive scores represent teams that *improved* their AP poll ranking over the course of the season

Descriptive statistics for the study variables are reported in Table 2. The mean of the rank difference variable is .00 because it represents a "zero sum" score across all the teams. Every team that has ever been ranked in a preseason or postseason poll in the past 25 years is included in the data, so any team that drops out of the poll is necessarily replaced by another team in the study that moves into the poll, and vice versa; therefore, the average change for all 115 teams across 25 years is exactly zero. The range is identical to what is shown in Table 1 after a slight transformation, in that the minimum score of -.171 represents UCLA (25 x -.171 = -4.28) and the maximum score of .096 represents Wisconsin (25 x .096 = 2.40). The standard deviation shows that the average team differs from the mean of "no change" between preseason and postseason scores by about one rank position (25 x. 04 = 1), which again shows that there is some modest variation to be explained in rank difference from preseason to postseason.

Table 2: Descriptive Statistics

Variables	Mean or proportion	Range	Standard deviation	N
Rank difference	.00	-.17 – .10	.04	2875
Tournament performance	.93	.04 – 3.76	.77	2875
Recruiting rank	.11	.00 – .59	.16	1265
All-time Final Four appearances	.87	0 – 18	1.78	115
Number of coaches	4.11	1 – 7	1.35	115
Power conference	.60	0 – 1	--	115
Regional university	.15	0 – 1	--	115
Liberal arts university	.02	0 – 1	--	115
National university	.83	0 – 1	--	115
Student population (1000s)	24.17	1.89 – 68.06	13.42	115
Metro area population (1000s)	2048.06	28.57 – 22,085.65	3596.30	115
Midwest	.22	0 – 1	--	115
South	.42	0 – 1	--	115
West	.22	0 – 1	--	115
Northeast	.14	0 – 1	--	115

Note: The mean for rank difference is calculated across 25 years (1990-2014); the mean for tournament performance is calculated across 25 years (1989-2013); the mean for recruiting rank is calculated across 11 years (2003-2013).

The mean for tournament performance is .93, indicating that an average team in an average year essentially made it into the NCAA tournament but lost in the opening round. The range and standard deviation show substantial variation in average tournament performance, indicating that some teams have been infrequent participants in the tournaments, while others usually advance to the middle and later rounds. The mean recruiting rank score is .11, indicating that the average team had a recruiting class ranked as about the 22nd best across the years of available data (25—(.11 x 25) = 22.25).

As for the remaining (Level 2) variables in Table 2, the average team in the study has made fewer than one all-time appearance in the Final Four of the NCAA tournament and has had slightly over four coaches in the 25 years of the study. Sixty percent of the teams compete in one of the NCAA's "Power Five" athletic conferences, and the majority (83%) of schools are considered to be national research universities. The average student body size is just over 24,000, and the average school is located in a metropolitan area of about two million people. The largest number of teams (42%) is located in the South, with just 14% of schools found in the Northeast, and 22% each in the Midwest and West.

Table 3 is a matrix for the bivariate correlations among all study variables. As in Table 2, the scores for rank difference, tournament performance, and recruiting rank are averaged across all available years to create a single score on each variable for each of the 115 teams. The table shows that rank difference is significantly and negatively correlated with tournament performance, recruiting rank, Final Four appearances, power conference, and student population. This indicates that teams are more likely to be *overrated* when they have done well in recent

NCAA tournaments, have signed better recruiting classes, have historically made deep runs in the tournament, play in a prestigious athletic conference, and have larger student bodies. At the bivariate level, at least, over half of the hypothesized factors included in this study appear to be significantly related to overrating or underrating teams.

Table 3: Correlations

	1	2	3	4	5
1. Rank difference	1.00	-.407***	-.517***	-.477***	.172
2. Tournament performance	--	1.00	.847***	.873***	-.473***
3. Recruiting rank	--	--	1.00	.788	-.420
4. Final Four appearances	--	--	--	1.00	-.375***
5. Number of coaches	--	--	--	--	1.00

Table 3 (continued): Correlations

	6	7	8	9	10
1. Rank difference	-.223*	.156	-.003	-.148	-.209*
2. Tournament performance	.414***	-.188*	-.091	.211*	.313**
3. Recruiting rank	.502***	-.247**	-.095	.269**	.348***
4. Final Four appearances	.311**	-.150	-.065	.166	.248**
5. Number of coaches	-.235*	.147	-.110	-.102	-.183
6. Power conference	1.00	-.460***	-.163	.497***	.516***
7. Regional university	--	1.00	-.055	-.936***	-.465**
8. Liberal arts university	--	--	1.00	-.299**	-.210*
9. National university	--	--	--	1.00	.519***
10. Student pop. (1000s)	--	--	--	--	1.00

Table 3 (continued): Correlations

	11	12	13	14	15
1. Rank difference	.025	.135	-.168	.027	.048
2. Tournament performance	-.095	.158	-.009	-.143	-.004
3. Recruiting rank	-.136	.011	.158	-.123	-.092
4. Final Four appearances	-.132	.075	.074	-.128	-.041
5. Number of coaches	.111	.050	-.020	.034	-.071
6. Power conference	.009	.129	.093	-.172	-.082
7. Regional university	.132	.018	-.111	.018	.116
8. Liberal arts university	-.036	-.070	.154	-.070	-.053
9. National university	-.114	.007	.052	.007	-.092
10. Student pop. (1000s)	-.148	.143	-.121	.100	-.117
11. Metro area pop. (1000s)	1.00	-.121	-.183	.065	.329***
12. Midwest	--	1.00	-.454***	-.278**	-.212*
13. South	--	--	1.00	-.454***	-.346***
14. West	--	--	--	1.00	-.212
15. Northeast	--	--	--	--	1.00

$N = 115$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Note: The mean for rank difference is calculated across 25 years (1990-2014); the mean for tournament performance is calculated across 25 years (1989-2013); the mean for recruiting rank is calculated across 11 years (2003-2013).

Table 4 is a multilevel regression model with rank difference as the dependent variable. Model 1 includes all Level 1 and Level 2 independent variables in the study, which addresses whether each predictor has an independent effect on the outcome while controlling for all other independent variables. We consider a variable to have a statistically significant effect only when the regression coefficient itself is significant *and* there is statistically significant reduction in prediction error compared to a model that does not include the variable. The *p*-values of the *t*-

tests for each variable are reported in the table next to each significant coefficient, and the proportional reduction in prediction error (PRPE) and chi-square tests for each model are reported at the bottom of the table.

Table 4: Multilevel Regression Model Predicting AP Rank Difference Score

	Model 1		Model 2		Model 3		Model 4		Model 5	
Predictors	b	se	b	se	b	se	b	se	b	se
Level 1										
Intercept	.066**	.021	.084**	.026	.052*	.020	.066*	.033	.054*	.022
Tournament performance	-.021**	.007	-.049**	.019	.019*	.007	-.029***	.007	-.003	.011
Recruiting rank	-.069*	.034	-.068*	.034	-.062^{+}	.034	-.067*	.029	-.067*	.034
Level 2										
Final Four appearances	.000	.003	.000	.002	.001	.003	.000	.002	.000	.003
Number of coaches	-.007*	.003	-.011**	.004	-.007*	.003	-.007	.005	-.007*	.003
Power conference	.003	.011	.003	.011	.029*	.011	.002	.017	.000	.011
Regional university	.008	.012	.007	.012	.005	.011	-.012	.023	.007	.012
Liberal arts university	-.016	.018	-.017	.018	-.023	.020	-.011	.056	-.016	.018
National university	--	--	--	--	--	--	--	--	--	--
Student population (1000s)	-.000	.000	-.000	.000	-.000	.000	-.000	.001	.000	.001
Metro area population (1000s)	-.000	.000	.000	.000	-.000	.000	.000	.000	.000	.000
Midwest	.016	.015	.014	.015	.012	.016	.015	.024	.016	.015
South	-.015	.012	-.016	.013	-.016	.013	-.015	.021	-.014	.012
West	-.001	.013	-.002	.014	-.001	.014	-.001	.022	-.002	.013
Northeast	--	--	--	--	--	--	--	--	--	--
Cross-Level Interactions										
Tournament x Coaches	--	--	.007^{+}	.004	--	--	--	--	--	--
Tournament x Power conf.	--	--	--	--	-.058***	.011	--	--	--	--
Tournament x Regional univ.	--	--	--	--	--	--	.039*	.019	--	--
Tournament x Liberal arts univ.	--	--	--	--	--	--	-.001	.052	--	--
Tournament x Student pop.	--	--	--	--	--	--	--	--	-.001^{+}	.000
Effect size & model improvement	PRPE	$\chi^2_{(df)}$	PRPE	$\chi^2_{(df)}$	PRPE	$\chi^2_{(df)}$	PRPE	$\chi^2_{(df)}$	PRPE	$\chi^2_{(df)}$
Level 1	7.93%	$357.32_{(2)}$*	--	--	--	--	--	--	--	--
Level 2 intercept slope	--	$4.53_{(10)}$	--	--	--	--	--	--	--	--
Level 2 tourn. perform. slope	--	--	6.10%	$9.64_{(1)}$*	37.01%	$33.02_{(1)}$*	8.75%	$9.04_{(2)}$*	5.45%	$5.83_{(1)}$*

$N_{Level\ 1}$ = 2875. $N_{Level\ 2}$ = 115.
$^{+}$ p < .10. * p < .05. ** p < .01. *** p < .001.
Note: PRPE = Proportional Reduction in Prediction Error.
All chi square values significant (p < .05) with the exception of
Level 2 intercept slope in Model 1

At Level 1, as hypothesized, both tournament performance and recruiting rank are significantly and negatively related to rank difference, independently of one another and of all other team and school characteristics in the model. In other words, teams that have had recent success in the NCAA tournament are more likely to be *overrated*, as are teams with more highly prized incoming player classes. For each additional round a team advances in the previous year's NCAA tournament, they can expect to be overrated by about half a spot in the subsequent year's

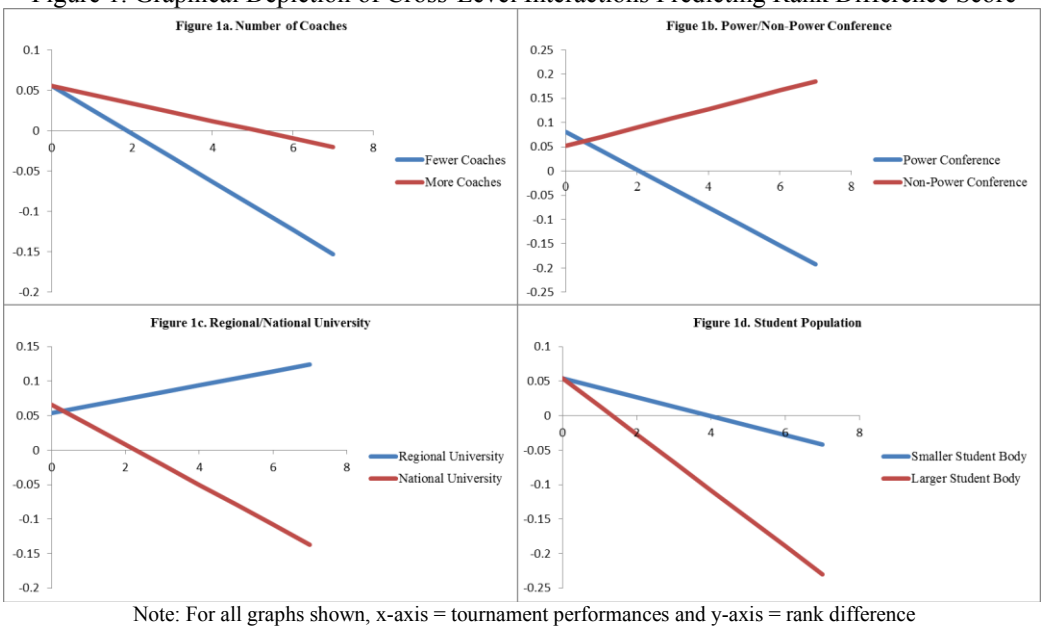
polls (25 x .021 = .53), a relatively sizable effect. The effect of recruiting rank is weaker; if a team were to improve its recruiting rank from unranked to the middle of ranked recruiting classes, it would predict being overrated by just less than one spot in the polls (13 x .069 = .90). Combined, the two Level 1 variables improved the model's predictive ability by nearly 8%.

At Level 2, none of the independent variables significantly improves the predictive power of the model according to the reported chi-square test for model fit; while the coefficient for number of coaches is significant, it does not significantly reduce prediction error, therefore we consider it to be nonsignificant. In sum, recent success in the NCAA tournament and in recruiting is predictive of being overrated in the polls, but other characteristics of the teams and schools are not directly related to the outcome.

Models 2 through 5 of Table 4 display the results from cross-level interactions between tournament performance and the Level 2 predictors. These interactions address the possibility that the effect of recent tournament performance may be stronger (or weaker) for teams with certain characteristics than the "main effect" reported in Model 1. Of the seven cross-level interactions tested, four showed both significant regression coefficients *and* a significant improvement in model fit: number of coaches, power conference, regional university (vs. national university), and student population.

In Model 2, the interaction between tournament performance and number of coaches is positive, indicating there is a tendency to *underrate* teams based on their recent tournament performance if they have had recent instability in the coaching position. Or put another way, teams with long-tenured coaches are even more likely to be *overrated* when they have had recent tournament success; stable teams get "extra credit" in the preseason polls if they advanced deeply in the tournament the year before. Figure 1a depicts this relationship graphically; the category of "fewer coaches" was defined by one standard deviation below the mean number of coaches, and "more coaches" was one standard deviation above. For all four graphs in Figure 1, rank difference is shown on the vertical axis and tournament performance is displayed on the horizontal axis. Including the interaction between tournament performance and number or coaches reduces the prediction error in the model by over 6%.

Figure 1. Graphical Depiction of Cross-Level Interactions Predicting Rank Difference Score



Note: For all graphs shown, x-axis = tournament performances and y-axis = rank difference

Models 3 and 4 show that the effect of tournament performance depends on whether a team belongs to a power conference and whether they are a regional university (compared to a national university). The results are quite consistent, showing that the overrating effect of tournament success is stronger for power conference teams and national research universities. In fact, the effect of tournament performance actually switches direction across the two categories in each model: non-power conference teams remain somewhat *underrated* the year following a strong tournament run (Figure 1b), as do teams from regional universities (Figure 1c). The power conference effect is particular strong in that it improves the model fit by over 37%; the interaction with regional university reduces prediction error by over 8%.

Model 5 shows a negative interaction term between tournament performance and student population, indicating that the overrating effect of recent tournament success is stronger the larger schools become (Figure 1d). As with Figure 1a, the "smaller student body" category represents schools one standard deviation below the mean student population, while "larger student body" is one standard deviation above. This interaction term improves the model fit by over 5%. In sum, these cross-level interactions show that though none of the Level 2 variables is directly related to the outcome, they are still influential as significant moderators of the effect of tournament performance on rank difference.

Discussion

On the whole, the sports journalists voting in the AP poll do a remarkable job of predicting where teams will end up at season's end. Of the 115 teams ever ranked, 87 college teams had an average rank difference of one spot or less. In other words, over time, they tend to be ranked as they ought to be, if we assume that voters do not become unwilling to change their opinions about teams as the season progresses. In fact, *preseason* rankings may be as predictive of postseason success as the *postseason* rankings are (Silver, 2011), indicating that basketball sportswriters are astute evaluators of teams' eventual potential. Still, there is the problem of the Badgers and the Bruins. This study finds a durable pattern of AP poll voters overrating some teams, while underrating others. These results offer us some insight into the mental shortcuts the pack of sports journalists use in assessing a large and complex field of teams. But this is not merely an abstract issue. Media coverage matters for colleges and their teams. While the effect may be modest, for any given school, being underrated might have a number of consequences on and off the court.

Living in the Moment

For all the talk of legendary tournament runs of the past, sports journalists do not seem to be biased in favor of colleges and universities with a historical track record of tournament success. Nor was there much evidence of *establishment* or *institutional biases* on their own. AP poll voters did not demonstrate favoritism to national universities, teams in elite conferences, schools in a particular region or urban areas. The only evidence of *establishment bias* on its own is a slight overrating of teams with stable coaching staff.

Instead, the results offer the most robust evidence for a *recency bias* in ranking teams. It is the team's performance in the most recent tournament that was most strongly and consistently associated with overrating. Moreover, the study revealed several interactions between the *recency bias* and other biases, but in the opposite direction of what might be expected.

The tournament, rather than raising journalists' expectations for underestimated teams that perform well, produces a type of "Matthew Effect" (Merton, 1968), where the already advantaged gain additional advantage. Colleges and universities in elite conferences and long-term coaches that perform well in the previous year's tournament are more overrated than teams in non-elite conferences and with coaching changes. This effect represents an interaction between the *recency bias* and the *establishment bias*. Similarly, the underrating of regional universities

that perform well in the tournament offers an example of an interaction the *recency bias* and the *institutional bias*.

Sports journalists are inherently biased against less established teams and less elite institutions. Instead, these biases become relevant in the context of the NCAA tournament as reporters cast their minds back to their most recent memory of teams. In recollecting the tournament, more established teams from universities with national reputations may stand out more vividly for any number reasons. For example, college programs in elite conferences garner more media coverage from ESPN, Fox Sports, and others, regularly refreshing the memories of fans as well as other sports journalists. Likewise, more prominent teams may be deemed more capable of repeating a strong performance from year to year than less established teams, whose recent success may be considered a fluke.

Another staple of off-season NCAA basketball coverage is an assessment of the rookies. The results showed that sports journalists tend to overrate teams with stronger incoming recruits, offering evidence of a *star bias*. It seems that, as a whole, sports journalists overestimate the impact that new additions to the team will make.

Taken together, this study suggests that rather than defaulting to picking historically successful teams or squads in power conference, sports journalists use two forms of recent information: tournament performance and incoming recruits. Because the AP poll aggregates the reporters' votes, the findings are only indicative of the "pack" as a whole. Future qualitative research with sports reporters ought to investigate their rationale behind their votes, considering differences between national and local journalists. Nonetheless, these finding represent an important advance in our understanding of how sports reporters make judgments about teams.

Do the Rankings Matter?

It is no secret that college basketball is a highly profitable business. In the 2011-12 fiscal year, the NCAA itself brought in $871.6 million in revenue, "most of which came from the rights agreement with Turner/CBS Sports" for the NCAA men's basketball tournament (NCAA, 2015). In 2009-10, men's college basketball programs in the top 14 conferences produced nearly $985 million dollars of their own revenue (Rishe, 2011).

While future research should focus directly on the financial implications of media bias in the polls, we can speculate as to some ways being overrated or underrated could lead to unequal distributions of revenues over time. Certainly, games between two "ranked" teams are more attractive to television networks and their viewers, resulting in more visibility for teams in the AP poll, particularly at the beginning of the season. Middle school and high school players are often first exposed to potential college destinations through television, providing a possible recruiting advantage for ranked teams. Fans themselves may be more interested in attending games in person when their favorite team is ranked, thereby increasing the program's revenue. In general, appearing in the AP poll is one measure of success in college athletics, which may allow athletic directors to justify funneling more money into basketball programs that are consistently ranked.

As a result of these processes, the "Matthew Effect" may trigger a strong feedback loop, as more highly visible teams bring in more highly rated recruits, have greater success in the postseason, and end up overrated in the polls again the following year, when the whole process repeats itself. Our results show that this may be especially true of programs that are already viewed as stable, have high visibility inside and outside of the sports world, and produce large numbers of alumni. This sports visibility may even affect schools overall budgets, as recent research has provided some strong evidence that athletic department success leads directly to increased alumni giving (Anderson, 2015.)

Conclusion

To our knowledge, this is the first study to examine the possibility that some college basketball teams are overrated or underrated in the AP college basketball poll relative to their actual performance over the course of a season. We also explore whether there is any patterned bias to this mismatch between preseason and postseason rankings. While we find that, overall, AP poll voters assess teams' abilities to a relatively accurate degree, there are some teams that are consistently overrated or underrated. Our results suggest that this is due to phenomenon in which voters overrate teams who have recently performed well in postseason play or have signed a promising group of recruits. We also show that some characteristics of the schools, including their prominence in both the athletic and academic landscape, exacerbate this overrating effect. On one hand, this suggests that the ranking process might be inherently unfair to certain basketball teams and schools. On the other hand, sports often thrive off of perceived controversy, particularly when diehard fans feel their teams have been somehow shortchanged or overlooked. Whether college athletic programs and the journalists that cover them actually wish to address and correct the biases identified here is a question left for future research.

Acknowledgement

The authors would like to thank Matthew Calvert for his contributions to data collection. The authors also recognize the men's basketball teams at Dr. Hawkins' undergraduate alma mater, the University of Wisconsin-Madison, whose persistent underrating in the AP poll originally inspired this research.

REFERENCES

Associated Press a. 2015. "The AP Top 25 Poll." Associated Press College Basketball, March 2015. Retrieved July 5, 2015. http://collegebasketball.ap.org/poll.

Associated Press b. 2015. "The AP Top 25 Poll." Associated Press College Football, January 2015. Retrieved July 5, 2015. www.collegefootball.ap.org/poll.

Associated Press c. 2015. "The AP Basketball Voters." Associated Press College Basketball, March 2015. Retrieved July 5, 2015. http://hosted.ap.org/dynamic/files/specials/interactives/_sports/top25_basketball/voters/men.html?SITE=AP.

Anderson, Michael L. 2015. "The Benefits of College Athletic Success: An Application of the Propensity Score Design." National Bureau for Economic Research.

Bennett, Brian. 2014. "NCAA Board Votes to Allow Autonomy for Five Power Conferences." ESPN. Retrieved July 12, 2015. http://espn.go.com/college-sports/story/_/id/11321551/ncaa-board-votes-allow-autonomy-five-power-conferences.

Boyle, Raymond, David Rowe, and Garry Whannel. 2010. "'Delight in Trivial Controversy'? Questions for Sports Journalism." In *The Routledge Companion to News and Journalism*, edited by Stuart Allan, 245-55. New York: Routledge.

Carrington, Ben. 2004. "Cosmopolitan Olympism, humanism and the spectacle of 'race.'" In *Post-Olympism?: Questioning Sport in the Twenty-First Century*, edited by John Bale and Mette Krogh Christensen, 81-98. London: Bloomsbury.

College Poll Archive, 2015. "College Poll Archive: Basketball". College Poll Archive. Retrieved July 6, 2015. http://collegepollarchive.com/mbasketball/#.VZ1rsvlVhBc.

Duncan, Margaret Carlisle and Barry Brummett. 1987. "The Mediation of Spectator Sport." *Research Quarterly for Exercise and Sport* 58:168-77.

Ellis, Zac. 2013. "AP Poll: Alabama, Ohio State Headline First Preseason Rankings." Sports Illustrated, August 2013. Retrieved July 8, 2015. www.si.com/college-football/campus-union/2013/08/17/ap-poll-alabama-ohio-state-headline-first-preseason-rankings.

Fishman, Mark. 1980. *Manufacturing the News*. Austin, TX: University of Texas Press.

Fortunato, John. A. 2008. "The NFL Programing Schedule: A Study of Agenda Setting." *Journal of Sports Media* 3: 27–49.

Gans, Herbert J. 1979. *Deciding What's News*. Evanston, IL: Northwestern University Press.

Gruneau, Richard. 1989. "Making Spectacle: A Case Study in Television Sports Production" In *MediaSport* edited by Lawrence A. Wenner, 134–154. Newbury Park, CA: Sage.

Harrison, Jackie. 2006. *News*. London: Routledge.

HoopsTournament.Net, 2015. "NCAA Tournament History." HoopsTournament.Net. Retrieved July 12, 2015. www.hoopstournament.net/.

Hutchins, Brett. 2011. "The Acceleration of Media Sport Culture." *Information, Communication, & Society* 14: 237-57.

Jhally, Sut. 1984. "The Spectacle of Accumulation: Material and Cultural Factors in the Evolution of the Sports/Media Complex." *Critical Sociology* 12: 41-57.

Klinenberg, Eric. 2005. "Convergence: News Production in a Digital Age." *Annals of the American Academy of Political and Social Science* 597: 48-64.

MacNeill, Margaret. 1996. "Networks: Producing Olympic Ice Hockey for a National Television Audience." *Sociology of Sport Journal* 13: 103–24.

McCleneghan, J. Sean. 1997. "The Myth Makers and Wreckers: Syndicated and Non-syndicated Sports Columnists at 103 Metro Newspapers." *Social Science Journal* 34: 337-250.

Merton, Robert K. 1968. "The Matthew Effect in Science." *Science* 159: 56-63.

NCAA. 2015. "Revenue." Retrieved on July 14, 2015 www.ncaa.org/about/resources/finances/revenue.

Raudenbush, Stephen W., Anthony S. Bryk, and Richard Congdon. 2011. *HLM 7: Hierarchical Linear and Nonlinear Modeling*. Lincolnwood, IL: Scientific Software International, Inc.

Rishe, Patrick. 2011. "Revenue Comparisons among Division I Men's Basketball Conferences." Forbes, 2011. Retrieved July 14, 2015 www.forbes.com/sites/sportsmoney/2011/03/01/revenue-comparisons-among-division-i-mens-basketball-conferences/.

Rivals.com, 2015. "Basketball Recruiting." Rivals.com. Retrieved July 12, 2015 https://rivalshoops.rivals.com/.

Sagarin, Jeff. 2015. "Jeff Sagarin's College Basketball Ratings." United States Naval Observatory, 2015. Retrieved July 8, 2015. http://sagarin.com/sports/cbsend.htm.

Shoemaker, Pamela and Stephen Reese. 1995. *Mediating the Message: Theories Of Influences On Mass Media Content.* White Plains, NY: Longman.

Silk, Michael L. and John Amis, 2000. "Institutional Pressures and the Production of Televised Sport." *Journal of Sport Management* 14: 267–292.

Silk, Michael L., Trevor Slack and John Amis. 2000. "Bread, Butter and Gravy: An Institutional Approach to Televised Sport Production." *Culture, Sport, Society* 3: 1–21.

Silver, Nate. 2011. "In N.C.A.A. Tournament, Overachievers Often Disappoint." *The New York Times*, 2011. http://fivethirtyeight.blogs.nytimes.com/2011/03/11/in-n-c-a-a-tournament-overachievers-often-disappoint/?_r=0).

United States Census Bureau a. 2015. "Geographic Terms and Concepts—Census Divisions and Census Regions." United States Census Bureau. Retrieved July 12, 2015 www.census.gov/geo/reference/gtc/gtc_census_divreg.html.

United States Census Bureau b. 2015. "Metropolitan and Micropolitan." United States Census Bureau. Retrieved July 12, 2015. www.census.gov/population/metro/.

U.S. News & World Report, 2015. "Best Colleges Rankings." U.S. News & World Report. Retrieved July 12, 2015. http://colleges.usnews.rankingsandreviews.com/best-colleges.

Wanta, Wayne. 2013. "Reflections on Communication and Sport: On Reporting and Journalists." *Communication & Sport* 1: 76-87.

Wanta, Wayne and Dawn Leggett. 1988. "Hitting Paydirt: Capacity Theory and Sports Announcers' Use of Cliches." *Journal of Communication* 38: 82–89.

Williams, Brien R. 1977. "The Structure of Televised Football." *Journal of Communication* 27: 133–39.

ABOUT THE AUTHORS

Daniel N. Hawkins: Ph.D., Associate Professor, Sociology, University of Nebraska—Omaha.

Andrew M. Lindner: Ph.D. Assistant Professor, Sociology, Skidmore College in Saratoga Springs, NY and Trends Editor of *Contexts*

Ryan Larson: graduate student, Department of Sociology, University of Minnesota—Twin Cities

Jonathan B. Santo: Ph.D., Associate Professor, Department of Psychology, University of Nebraska—Omaha

Journal of Sports Management and Commercialization is one of the four thematically focused journals that support the Sport and Society knowledge community—its journal collection, book series, and online community.

The journal focuses on sports organizations, leadership, and management. It explores the impact of sports and sporting events on communities, nations, and international relations, and publishes articles that examine laws related to governance and participation.

Journal of Sports Management and Commercialization is a peer-reviewed scholarly journal.

ISSN 2381-6937