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# Clocking Gender Differences

## Televised Olympic Clock Time in the 1996–2006 Summer and Winter Olympics

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Analysis of all 348 prime-time hours of the 1996–2006 Olympic telecasts (three Summer, three Winter) pinpointed trends in coverage of men's and women's sports. Results indicate that while men athletes and events received the majority of clock time in all six Olympic telecasts, the Summer Olympic telecasts treated women far more equitably than the Winter Olympic telecast. The longitudinal study does not offer any reason to feel that coverage of women's athletics is improving over time, finding that the proportion of clock time devoted to men's and women's sports is relatively the same in 2006 compared to ten years earlier.

***Keywords:*** *sport; media; Olympics; gender; clock time*

More than a decade ago, Eastman, Newton, and Pack (1996) coined the term "megasporting event" to depict the type of sports event that people mark their calendars to watch—the kind of event that transcends sports, becoming part and parcel of the American identity. Megasporting events in the United States include annual occasions such as the Super Bowl, the Indianapolis 500, and the Kentucky Derby, but there is little question that the one of the largest megasporting events happens every two years, when either a Summer or Winter Olympics is staged in front of a viewing audience of billions (Gordon and Sibson 1998). NBC spent $3.5 billion to acquire rights to the 2000–2008 Olympic Games and recently spent another $2.2 billion for the rights to the 2010 and 2012 Games (Abrahamson 2001; Sandomir 2005). NBC spent such immense sums of money because they make the money back in increased commercial and advertising rates that come along with dominating 17 consecutive nights of programming—plus they are provided with the opportunity to promote their prime-time lineup and to brand themselves as the Olympic network (hence the Olympic rings as part of the NBC logo shown on any program). As a result, the Olympics are one of the few television sports contracts that are routinely profitable.

With immense exposure comes the ability to shape the Olympic story. Airing 70 Olympic hours during prime time for 17 consecutive nights of NBC's 2004 Olympic coverage is saturating, yet it represents just 6 percent of the overall Olympic experience (more than 1,200 hours) that was shown round-the-clock on NBC and its six

other sister networks (CNBC, MSNBC, USA, Telemundo, Bravo, and NBC HDTV). In 2006, NBC aired 65 hours of Winter Olympic prime-time programming, yet this represents just 16 percent of the 418 hours NBC telecast on all these networks. During an Olympics, NBC's prime-time telecast becomes the virtual highlight reel of the each day's events, as only the most desirable events and athletes are depicted to attract the most desirable demographics. The prime-time telecast still constitutes 80 percent to 85 percent of the total Olympic viewing audience as people have learned to tune in each night for the "best of the best" in terms of Olympic coverage. In sum, people can safely assume that NBC will select the majority of the stories, athletes, and events that the majority of people want to see during its prime-time telecast.

In the 1996 Atlanta Summer Olympics, NBC labeled its Olympics as the "Year of the Woman," touting itself as doing a better job of promoting women's sport (Lindsey 1996). Since then, two more Summer Games (Sydney and Athens) and three more Winter Games (Nagano, Salt Lake City, and Torino) have occurred, leaving questions about the place of gender fairness within the overall Olympic telecast (Billings and Eastman 2002, 2003). This study examines the number of minutes devoted to each men's and women's sport in the 1996–2006 Olympic telecasts. The objective of providing this longitudinal perspective is to highlight long-term gender trends within this very prominent sportscast by isolating men's and women's Olympic clock time in six consecutive Olympics. In doing so, the study underscores how the Olympic telecast itself is changing over time in terms of spotlighting different events.

## Related Literature

While communication scholars have rightly grounded sports media research in terms of cultivation (Gerbner et al. 1986) and self-categorization (Turner et al. 1987) theories, the most prominent theories to underscore the importance of exposure (i.e., clock time) have been framing (Goffman 1974; Tankard 2001) and agenda setting (McCombs and Shaw 1972). Scholarly use of media frames is particularly important to understanding Olympic television production, as the prime-time telecast shapes and edits sporting event content to showcase the best stories and events, even when the Olympics are held in television-friendly time zones (such as Atlanta in 1996 and Salt Lake City in 2002). As a result, what is framed within prime time tells an audience what is or is not important, with the most basic of these frames being exposure (referring to the sporting events deemed worthy of the spotlight in the coveted prime-time broadcast). As Entman (1993) has explained,

> To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described. (p. 52)

Gitlin (1980) went on to define *framing* as having selection, emphasis, and exclusion functions that directly apply to network announcing in an Olympic telecast because NBC makes overt choices on what to show (selection), what to show a lot (emphasis), and what to avoid (exclusion). In sum, NBC airs sports like swimming and skiing a decent amount, shows gymnastics and figure skating at a substantial rate, and excludes events like boxing and hockey that have not proven to attract the wide demographic group that NBC wants the Olympics to capture.

The most prevalent form of gendered sport research of American telecasts has used analyses of raw clock time—comparing the minutes in a given telecast devoted to men's and women's sports. Harry's (1995) argument that sports lag behind modern attitudes has never been more apropos than in the amount of mass media coverage devoted to women's athletics. While Lumpkin and Williams (1991) found that just 9 percent of all *Sports Illustrated* articles were specified to women's sports, this is actually generous when compared to the 2 percent of the coverage given to women on ESPN's *SportsCenter* (Adams and Tuggle 2004). In fact, one analysis found that the National Spelling Bee received more *SportsCenter* coverage than all of women's athletics during a given week of coverage (Eastman and Billings 2000). Still, it is not just the lack of coverage given to women's sports; it is whether some sports are covered at all. Kane (1988) found that women were three times as likely to be shown in *Sports Illustrated* (*SI*) in sex-appropriate sports (i.e., tennis, swimming, or gymnastics) than in sex-inappropriate sports (i.e., soccer, basketball), findings that are consistent with other sex biases found in *SI* studies (Bishop 2003; Cuneen and Sidwell 1998; Daddario 1992).

Eastman and Billings (2000) examined media coverage of female athletes in televised sports programs, finding that CNN's now-defunct *Sports Tonight* devoted only 7 percent of its coverage to women athletes, while ESPN's *SportsCenter* only devoted 5 percent to female athletes. Tuggle and Owen's (1999) analysis of the 1996 Atlanta Olympic Games additionally revealed that the television network overwhelmingly televised those events that were "physically attractive" to the viewer, such as gymnastics, swimming, and sprinting. The "physically unattractive" sports, such as field hockey, shot put, discus, and softball were relegated to short segments between main events (Tuggle and Owen 1999). As Jones, Murrell, and Jackson (1999) have contended, the domain of sports broadcasting is still divided by gender, separating the "pretty" from the "powerful" (p. 183). Kane (1989) argued this long ago, finding that sports are divided by gender and then divided again by whether they are beautiful and graceful or sweaty and powerful. Such findings lead one to believe that the Summer Games (offering many events that involve women athletes in swimsuits and leotards) will yield higher clock time totals than the Winter Games (offering many events that involve women athletes in parkas and other less sexually charged apparel).

Still, the epicenter of mediated sport clock time research has been the Olympic telecast, presumably because of its status as the largest of all megasporting events

(Eastman, Newton, and Pack 1996). A decade and a half ago, Higgs and Weiller (1994) analyzed the 1992 Barcelona Summer Olympics, finding that 56 percent of all clock time was devoted to men's sports, with the remaining 44 percent devoted to women athletes. However, as the number of Olympic clock time studies grew, slight differences in male–female disparities were reported—not because of coding error as much as differing operational definitions of what should or should not be included in an overall analysis. For instance, Tuggle and Owen (1999) found that the gap between men and women athletes in the 1996 Atlanta Summer Olympics had closed somewhat to a 53 percent/47 percent ratio, but Eastman and Billings (1999) found the gap to be even smaller: 51 percent/49 percent. Such trends differed depending on definitions of clock time (examinations limited to prime time versus beyond prime time or differences as to whether analyses should halt at 11:00 p.m. EST or should continue until the Olympic network ends the telecast for local news). Subsequent studies (e.g., Billings and Eastman 2002, 2003; Billings and Angelini 2007) consistently found trends favoring men athletes—particularly in the Winter Games—yet were isolated to single Olympic telecasts rather than longitudinal in nature.

## Hypotheses/Research Questions

Given that previous research has been conducted on overall clock time issues specifically within the Olympic Games, two spheres of inquiry are imperative to furthering knowledge in this area: (1) the extent to which clock time issues have improved or diminished over time and (2) the extent to which these clock time disparities remain consistent from sport to sport. Previous analyses have focused on single snapshots in time (i.e., an isolated Olympic telecast). These analyses impart knowledge that is valuable and yet limited in scope as the participation (or lack thereof) of a particular athlete (say, Michelle Kwan's withdrawal on the eve of the 2006 Winter Olympics) can have a significant impact on the exposure variable. By examining long-term trends during six consecutive Olympic Games, such individualized influences are significantly reduced. As such, the following three hypotheses and two research questions have been formulated to address longitudinal trends:

*Hypothesis 1:* Men athletes will receive more clock time in all six Olympic telecasts (1996–2006).

*Hypothesis 2:* The gap between the clock time of men athletes and women athletes will be greater in Winter Olympic telecasts than in Summer Olympic telecasts.

*Hypothesis 3:* A greater number of men's events than women's events will be aired within each Olympic telecast.

*Research Question 1a:* In which events do men athletes receive significantly more clock time than women athletes?

*Research Question 1b:* In which events do women athletes receive significantly more clock time than men athletes?

*Research Question 2:* Which Olympic events are shown significantly more in the most recent Olympics (2004 and 2006) than in previous Olympics?

## Method

A total of 348 hours of prime-time Summer and Winter Olympic coverage was videotaped for this analysis. The 348 hours represents 100 percent of NBC's (and in 1998 CBS's) coverage during 102 Olympic evenings (July 19–August 4, 1996; February 6–22, 1998; September 15–October 1, 2000, and February 8–24, 2002; August 13–29, 2004; February 10–26, 2006). Since NBC recently expanded its coverage to one hour beyond prime-time hours, the 2004 and 2006 analyses incorporated this expanded coverage as well (eight to midnight EST Monday through Saturday, seven to midnight EST the first two Sundays, 7:00–11:00 EST during the Sunday Closing Ceremony). In sum, fifty-five evening hours were aired in 1996, fifty-one hours in 1998, fifty-four in 2000, fifty-two hours in 2002, seventy hours in 2004, and sixty-five hours in 2006—resulting in the 348 hours that are included within this longitudinal analysis. The choice of prime-time hours only appears warranted given that the most prominent events and athletes are reserved for the evening telecast, the evening hours are used to determine overall Olympic rating, and these hours are the most appropriate subset of the total coverage for comparison to analyses of previous Games.

To determine the amount of clock time devoted to men's and women's events, stopwatches and VCR time-counters were used to determine the number of minutes devoted to each Olympic sport in each Olympic night of each Olympic telecast. Pairs events (ice dancing and pairs figure skating) were excluded from the database, leaving only single-gendered sports relevant for analysis. Sixteen different student coders measured and then totaled clock time by gender and sport for each of the six Olympic productions. Commercials and promotions were excluded from the analysis. When eighteen randomly selected hours were coded a second time, intercoder reliability using Cohen's kappa exceeded 99 percent.

## Results

Analysis showed that a total of thirty-four men's events and thirty-one women's events were offered in at least one of the three Summer Olympics, and fourteen men's events and thirteen women's events were offered in at least one of the three Winter Olympics. Raw totals of clock time for each of these sports are reported in Table 1 (for men's event totals) and Table 2 (for women's event totals) in the Summer Games.

Combining these two tables (reported as hours:minutes) shows that men athletes and their respective sports were shown a slight majority of the time in each of the three Summer Olympic telecasts, with an overall split of 51.9 percent for men's events and 48.1 percent for women's events. The difference between men and women athletic coverage was significant in 2000 ($\chi^2 = 6.01$, $df = 1$, $p = .03$), but the

**Table 1**
**Clock Time for Men in the 1996, 2000, and 2004 Summer Olympics**

| Event | 1996 | % | 2000 | % | 2004 | % | Total | % |
|---|---|---|---|---|---|---|---|---|
| Archery | 0:08 | 0.8 | 0:00 | 0.0 | 0:00 | 0.0 | 0:08 | 0.2 |
| Badminton | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | 0.0 | < 0.01 | < 0.1 |
| Baseball | 0:07 | 0.7 | 0:12 | 1.2 | 0:03 | 0.2 | 0:22 | 0.7 |
| Basketball | 2:49 | 16.3 | 1:50 | 11.2 | 0:09 | 0.7 | 4:48 | 8.6 |
| Beach volleyball | NA | NA | 0:14 | 1.4 | 0:01 | 0.1 | 0:15 | 0.4 |
| Boxing | 0:00 | 0.0 | 0:00 | 0.0 | 0:01 | 0.1 | 0:01 | < 0.1 |
| Canoe/kayak | 0:13 | 1.3 | 0:00 | 0.0 | 0:03 | 0.2 | 0:16 | 0.5 |
| Cycling | 0:21 | 2.0 | 0:19 | 1.9 | 0:40 | 3.0 | 1:20 | 2.4 |
| Diving | 1:25 | 8.2 | 1:10 | 7.1 | 1:59 | 8.9 | 4:34 | 8.2 |
| Equestrian | 0:00 | 0.0 | 0:18 | 1.8 | 0:01 | 0.1 | 0:19 | 0.6 |
| Fencing | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | 0.0 | < 0:01 | < 0.1 |
| Field hockey | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | 0.0 | < 0:01 | < 0.1 |
| Gymnastics | 5:51 | 33.9 | 3:58 | 24.2 | 5:50 | 26.1 | 15:39 | 28.0 |
| Handball | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | 0.0 | < 0:01 | < 0.1 |
| Judo | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | 0.0 | < 0:01 | < 0.1 |
| Marathon | 0:00 | 0.0 | 0:39 | 4.0 | 0:00 | 0.0 | 0:39 | 1.1 |
| Mountain biking | 0:00 | 0.0 | 0:04 | 0.4 | 0:00 | 0.0 | 0:04 | 0.1 |
| Rhythmic gymnastics | 0:00 | 0.0 | 0:00 | 0.0 | 0:00 | 0.0 | 0:00 | 0.0 |
| Rowing | 0:00 | 0.0 | 0:31 | 3.2 | 0:15 | 1.1 | 0:46 | 1.4 |
| Sailing | 0:00 | 0.0 | 0:00 | 0.0 | 0:02 | 0.1 | 0:02 | 0.1 |
| Shooting | 0:00 | 0.0 | 0:00 | 0.0 | 0:01 | 0.1 | 0:01 | < 0.1 |
| Soccer | 0:06 | 0.6 | 0:12 | 1.2 | 0:06 | 0.4 | 0:24 | 0.7 |
| Swimming | 0:46 | 4.4 | 2:31 | 15.4 | 4:49 | 21.5 | 8:06 | 14.5 |
| Synchronized swimming | 0:00 | 0.0 | 0:00 | 0.0 | 0:00 | 0.0 | 0:00 | 0.0 |
| Table tennis | 0:35 | 3.4 | 0:00 | 0.0 | < 0:01 | 0.0 | 0:35 | 1.0 |
| Tae kwon do | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | 0.0 | < 0:01 | < 0.1 |
| Tennis | 0:05 | 0.5 | 0:00 | 0.0 | 0:01 | 0.1 | 0:06 | 0.2 |
| Track and field | 3:45 | 21.8 | 2:49 | 17.2 | 6:47 | 30.3 | 13:21 | 23.9 |
| Trampoline | NA | NA | NA | NA | 0:00 | 0.0 | 0:00 | 0.0 |
| Triathlon | 0:00 | 0.0 | 0:35 | 3.6 | < 0:01 | 0.0 | 0:35 | 1.0 |
| Volleyball | 0:00 | 0.0 | 0:19 | 1.9 | 0:57 | 4.2 | 1:16 | 2.3 |
| Water polo | 0:00 | 0.0 | 0:00 | 0.0 | 0:01 | 0.1 | 0:01 | < 0.1 |
| Weightlifting | 0:09 | 0.9 | 0:19 | 1.9 | 0:03 | 0.2 | 0:31 | 0.9 |
| Wrestling | 0:54 | 5.2 | 0:22 | 2.2 | 0:30 | 2.2 | 1:46 | 3.2 |
| Total | 17:14 | 100.0 | 16:22 | 100.0 | 22:22 | 100.0 | 55:58 | 100.0 |
| Percentage | | 50.7 | | 52.5 | | 52.3 | | 51.9 |

NOTE: NA = not applicable.

other two Olympics yielded a gap that favored men athletes, albeit not by a significant margin. The smallest gap was in the 1996 Games—the Olympics that NBC promoted as the "Games of the Women"—when NBC showed women's events nearly half the time, but the clock time increase in comparison to the women's event coverage in the subsequent two Summer Olympic telecasts was less than 2 percent.

**Table 2**
**Clock Time for Women in the 1996, 2000, and 2004 Summer Olympics**

| Event | 1996 | % | 2000 | % | 2004 | % | Total | % |
|---|---|---|---|---|---|---|---|---|
| Archery | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | < 0.1 | < 0:01 | < 0.1 |
| Badminton | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | < 0.1 | < 0:01 | < 0.1 |
| Basketball | 0:17 | 1.7 | 0:15 | 1.6 | 0:03 | 0.2 | 0:35 | 1.1 |
| Beach volleyball | NA | NA | 0:00 | 0.0 | 2:00 | 9.8 | 2:00 | 3.9 |
| Canoe/kayak | 0:13 | 1.3 | 0:00 | 0.0 | 0:15 | 1.2 | 0:28 | 0.9 |
| Cycling | 0:18 | 1.8 | 0:00 | 0.0 | < 0:01 | < 0.1 | 0:18 | 0.6 |
| Diving | 2:35 | 15.3 | 2:04 | 14.0 | 3:08 | 15.4 | 7:47 | 15.0 |
| Equestrian | 0:06 | 0.6 | 0:00 | 0.0 | < 0:01 | < 0.1 | 0:06 | 0.2 |
| Fencing | 0:00 | 0.0 | 0:00 | 0.0 | 0:05 | 0.4 | 0:05 | 0.2 |
| Field hockey | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | < 0.1 | < 0:01 | < 0.1 |
| Gymnastics | 9:34 | 57.2 | 5:04 | 34.3 | 6:09 | 30.2 | 20:47 | 40.1 |
| Handball | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | < 0.1 | < 0:01 | < 0.1 |
| Judo | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | < 0.1 | < 0:01 | < 0.1 |
| Mountain biking | 0:25 | 2.5 | 0:00 | 0.0 | 0:00 | 0.0 | 0:25 | 0.8 |
| Rhythmic gymnastics | 0:02 | 0.2 | 0:00 | 0.0 | < 0:01 | < 0.1 | 0:02 | 0.1 |
| Rowing | 0:00 | 0.0 | 0:07 | 0.8 | 0:14 | 1.1 | 0:21 | 0.7 |
| Sailing | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | < 0.1 | < 0:01 | < 0.1 |
| Shooting | 0:00 | 0.0 | 0:00 | 0.0 | 0:00 | 0.0 | 0:00 | 0.0 |
| Soccer | 0:23 | 2.3 | 0:00 | 0.0 | 0:14 | 1.1 | 0:37 | 1.2 |
| Softball | 0:30 | 3.0 | 0:00 | 0.0 | 0:00 | 0.0 | 0:30 | 1.0 |
| Swimming | 0:55 | 5.5 | 2:06 | 14.2 | 3:00 | 14.7 | 6:01 | 11.6 |
| Synchronized swimming | 0:21 | 2.1 | 0:00 | 0.0 | 0:19 | 1.6 | 0:40 | 1.3 |
| Table tennis | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | < 0.1 | < 0:01 | < 0.1 |
| Tae kwon do | 0:00 | 0.0 | 0:04 | 0.5 | < 0:01 | < 0.1 | 0:04 | 0.1 |
| Tennis | 0:03 | 0.3 | 0:02 | 0.2 | 0:01 | 0.1 | 0:06 | 0.2 |
| Track and field | 1:02 | 6.2 | 3:39 | 24.7 | 4:05 | 20.0 | 8:46 | 16.9 |
| Trampoline | NA | NA | NA | NA | 0:11 | 0.9 | 0:11 | 0.4 |
| Triathlon | 0:00 | 0.0 | 0:40 | 4.5 | 0:22 | 1.8 | 1:02 | 2.0 |
| Volleyball | 0:00 | 0.0 | 0:46 | 5.2 | 0:12 | 1.0 | 0:58 | 1.9 |
| Water polo | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | < 0.1 | < 0:01 | < 0.1 |
| Weightlifting | 0:00 | 0.0 | 0:00 | 0.0 | < 0:01 | < 0.1 | < 0:01 | < 0.1 |
| Total | 16:44 | 100.0 | 14:47 | 100.0 | 20:22 | 100.0 | 51:53 | 100.0 |
| Percentage | | 49.3 | | 47.5 | | 47.7 | | 48.1 |

NOTE: NA = not applicable.

Similarly, Table 3 indicates the clock time devoted to men athletes and Table 4 shows the clock time for women athletes in the Winter Olympics.

The combination of Table 3 and Table 4 offer much more eye-opening results. All three Winter Olympics strongly favored men athletes and events by significant margins (for 1998, $\chi^2 = 31.4$, $df = 1$, $p = .001$; for 2002, $\chi^2 = 15.36$, $df = 1$, $p = .001$; and for 2006, $\chi^2 = 12.63$, $df = 1$, $p = .001$). After excluding pairs events from the analysis, all three Winter Olympics yielded twenty- to thirty-percentage-point gaps between men's

**Table 3**
**Clock Time for Men in the 1998, 2002, and 2006 Winter Olympics**

| Event | 1998 | % | 2002 | % | 2006 | % | Total | % |
|---|---|---|---|---|---|---|---|---|
| Alpine skiing | 5:16 | 39.5 | 1:40 | 11.4 | 3:53 | 18.4 | 10:49 | 22.4 |
| Bobsleigh | 0:41 | 5.1 | 1:16 | 8.6 | 1:30 | 7.4 | 3:27 | 7.2 |
| Cross-country | 0:00 | 0.0 | 0:27 | 3.1 | 1:21 | 6.7 | 1:48 | 3.7 |
| Curling | 0:00 | 0.0 | 0:00 | 0.0 | 0:00 | 0.0 | 0:00 | 0.0 |
| Figure skating | 3:10 | 23.8 | 3:41 | 25.1 | 2:51 | 14.1 | 9:42 | 20.1 |
| Freestyle skiing | 0:11 | 1.4 | 0:34 | 3.9 | 1:34 | 7.7 | 2:19 | 4.8 |
| Ice hockey | 0:16 | 2.0 | 0:50 | 5.7 | 0:00 | 0.0 | 1:06 | 2.3 |
| Luge | 0:44 | 5.5 | 0:46 | 5.2 | 0:16 | 1.3 | 1:46 | 3.7 |
| Nordic combined | 0:00 | 0.0 | 0:49 | 5.6 | 0:00 | 0.0 | 0:49 | 1.7 |
| Short track | 0:18 | 2.3 | 0:29 | 3.3 | 1:27 | 7.2 | 2:14 | 4.6 |
| Skeleton | 0:00 | 0.0 | 0:23 | 2.6 | 0:13 | 1.1 | 0:36 | 1.2 |
| Ski jumping | 0:43 | 5.4 | 0:54 | 6.1 | 0:43 | 3.5 | 2:20 | 4.8 |
| Snowboarding | 0:12 | 1.5 | 1:06 | 7.5 | 2:25 | 11.9 | 3:43 | 7.7 |
| Speed skating | 1:49 | 13.6 | 1:45 | 11.9 | 4:01 | 19.9 | 7:35 | 15.7 |
| Total | 13:20 | 100.0 | 14:40 | 100.0 | 20:14 | 100.0 | 48:14 | 100.0 |
| Percentage | | 61.1 | | 64.7 | | 60.0 | | 61.6 |

**Table 4**
**Clock Time for Women in the 1998, 2002, and 2006 Winter Olympics**

| Event | 1998 | % | 2002 | % | 2006 | % | Total | % |
|---|---|---|---|---|---|---|---|---|
| Alpine skiing | 2:17 | 26.9 | 1:51 | 23.1 | 3:00 | 22.2 | 7:08 | 23.7 |
| Bobsleigh | 0:00 | 0.0 | 0:21 | 4.4 | 0:25 | 3.1 | 0:46 | 2.6 |
| Cross-country | 0:00 | 0.0 | 0:00 | 0.0 | 0:00 | 0.0 | 0:00 | 0.0 |
| Curling | 0:00 | 0.0 | 0:00 | 0.0 | 0:00 | 0.0 | 0:00 | 0.0 |
| Figure skating | 3:18 | 38.8 | 2:06 | 26.2 | 4:49 | 35.6 | 10:13 | 34.0 |
| Freestyle skiing | 0:18 | 3.5 | 0:53 | 11.0 | 0:58 | 7.1 | 2:09 | 7.2 |
| Ice hockey | 0:19 | 3.7 | 0:12 | 2.5 | 0:00 | 0.0 | 0:31 | 1.7 |
| Luge | 0:00 | 0.0 | 0:00 | 0.0 | 0:01 | 0.1 | 0:01 | < 0.1 |
| Nordic combined | 0:00 | 0.0 | 0:28 | 5.8 | 0:00 | 0.0 | 0:28 | 1.6 |
| Short track | 0:11 | 2.2 | 0:13 | 2.7 | 0:30 | 3.7 | 0:54 | 3.0 |
| Skeleton | 0:00 | 0.0 | 0:08 | 1.7 | 0:11 | 1.4 | 0:19 | 1.1 |
| Ski jumping | NA | NA | NA | NA | NA | NA | NA | NA |
| Snowboarding | 0:37 | 7.3 | 0:41 | 8.5 | 1:37 | 11.9 | 2:55 | 9.7 |
| Speed skating | 1:30 | 17.6 | 1:08 | 14.1 | 2:01 | 14.9 | 4:39 | 15.5 |
| Total | 8:30 | 100.0 | 8:01 | 100.0 | 13:32 | 100.0 | 30:03 | 100.0 |
| Percentage | | 38.9 | | 35.3 | | 40.0 | | 38.4 |

NOTE: NA = not applicable.

and women's events. These findings support two predictions. First, Hypothesis 1 postulated that men would receive more coverage than women in all six Olympics; this proved true, but the difference was only significant in four of the six Olympic telecasts.

Second, Hypothesis 2 argued that the Winter Olympic telecasts would more heavily favor men athletes and sports than would the Summer Olympic telecasts, a prediction that was overwhelmingly supported as the gap between men's and women's clock time was at least five times the gap in any Summer Olympic analysis.

The third hypothesis predicted that a wider array of men's sporting events would be highlighted whereas fewer women's events would be shown. As evidenced in Tables 1 through 4, this hypothesis also proved true. Regarding the Summer Games, eight men's events (basketball, cycling, diving, gymnastics, swimming, track and field, volleyball, and wrestling) received at least one hour of coverage, while only six women's events (beach volleyball, diving, gymnastics, swimming, track and field, and triathlon) received an hour or more. Twelve men's events received at least 1 percent or more of the coverage, while 11 women's events received at least 1 percent of the overall airtime. While the differences are slight, they still favor the men, as they were shown in more events—presumably displaying a wider range of skills to the masses watching at home.

In the Winter Olympic tables, the differences were again more stark. Eleven different men's events received at least one total hour of airtime, compared to just five women's events. Thirteen different men's events received at least 1 percent of the total composite airtime in the three Winter Games, while only ten women's events equaled that same criterion. In sum, the third hypothesis, arguing that a wider range of men's sports would be aired, was supported. When combining the three hypotheses, one can conclude that men were shown more than women both in terms of depth (number of minutes) and breadth (number of Olympic events).

Deeper examination into the numbers on the Summer Olympic side shows that the five most shown men's events were, chronologically, from the most shown: gymnastics, track and field, swimming, basketball, and diving. For women, the top five were quite similar: gymnastics, track and field, diving, swimming, and beach volleyball. Still, it is important to note that while gymnastics was number one on both lists, the gap between gymnastics and track and field was fewer than two and a half hours for men, but was more than eleven hours for women.

Research Questions 1a and 1b queried which sports were more likely to be aired for each gender. The data in Tables 1 through 4 succinctly answers this two-part question. Analysis was limited to those events that were aired for a total of at least one hour within the composite of the three Olympic telecasts, and significant differences were determined to be any event in which coverage differed from gender to gender by more than one hour. Given that, the Summer Olympic events in which men were more likely to be shown than women were basketball, cycling, swimming, track and field, and volleyball. While some predictions for these differences could be proffered (i.e., lingering effects of the "Dream Team" in basketball or Lance Armstrong's effect on the world of men's cycling), the results only speak to the significant clock time differences rather than the reasons for them.

In contrast, women were more likely than men to be shown in beach volleyball (rising from no coverage to a two full hours of clock time in 2004), diving, and

gymnastics. While all of these sports could be viewed as the fairly attractive/graceful category that Kane (1988) outlined (with the possible exceptions of basketball and the field sports in track and field), it is interesting to note that all of the sports in which women received the majority of the coverage involved the wearing of swimsuits or leotards. One could presume that the same desire to highlight attractive athletes would result in a desire for attractive male athletes, yet Jones, Murrell, and Jackson's (1999) analysis found that a very different dichotomy was at work, with sports journalists highlighting "pretty" females but "powerful" males. Winter Olympic analyses yielded strong trends in favor of men's athletics. A large number of events (including alpine skiing, bobsledding, cross-country skiing, luge, short-track speed skating, and speed skating) were all shown significantly more for men than women.

Research Question 2 refers to longitudinal trends in the types of events covered in the Olympic telecast. In this analysis, significant shifts in event programming structures were defined as those events that either gained or lost an hour of coverage from one Olympics to the next. For men, the sports that gained coverage in the Summer Olympics were swimming and track and field (largely the result of network timeslot shifting in which these events moved from earlier time slots to within prime-time coverage) and, in the Winter Olympics, snowboarding and speed skating. Men's sports that lost at least one hour of coverage were basketball and—just in the year 2000—gymnastics, which then rebounded to become a net gain in 2004, a trend similar to that of men's alpine skiing, which dropped in 2002 only to recover to 1998 levels in the 2006 Games. For women, the events in which they gained airtime included beach volleyball, diving, swimming, and track and field. The only event in which they lost a significant amount of airtime was in gymnastics, which may have reached a media saturation point in 1996, the year of the gold-medal-winning "Magnificent Seven" team. In sum, there were definite trends by gender and by event that indicate that the Olympic telecast is quite dynamic—a constantly adjusted megasporting event that is geared to garner the highest ratings for the best demographics.

## Discussion

This study provides valuable insight regarding the amount of exposure (defined as both minutes of overall clock time and the range of events shown at least one hour) devoted to men's and women's events in the Olympic Games. Given that Billings (2006) found that gender biases were more likely to occur when the event being covered involves subjective evaluation, such differences in exposure could influence the type of commentary ascribed to men and women athletes by Olympic sportscasters. Thus, for instance, it is interesting to note the marked increase in coverage of beach volleyball (objective evaluation, albeit with a line judge utilized) in

the Summer Olympics, while the Winter Olympics is increasingly showing events such as snowboarding, which involve subjective evaluations (i.e., outside judges) and, consequently, are more apt to portray gender biases. Because of clock time differences, an agenda-setting framework is in place that could yield divergent gendered dialogues (Billings, Angelini, and Eastman 2005).

Probing the concept of the subjective versus objective dichotomy further, in the Summer Games all of the events in which men were shown significantly more than women (basketball, cycling, swimming, track and field, and volleyball) involved objective assessment (i.e., stopwatches and other clear forms of scoring), while the events that women were shown more were beach volleyball, diving, and gymnastics, in which two of the three involve outside judges as the final arbiters of success, perhaps leading commentators to evaluate athletic performances to a greater extent and subsequently offering increased opportunity for gender biases.

Furthermore, the results demonstrate a much more dominant male frame in the Winter Olympics than in the Summer, as Summer Olympic telecasts slightly tilted toward men athletes, but the Winter telecasts often yielded a near two-to-one ratio between the men's and women's events. Perhaps more important than the raw totals is the determination of why such shifts and adjustments took place. While this study does not attempt to interpret the cognitive processes of NBC gatekeepers in determining what to show, three additional propositions can be offered.

First, the amount of clock time was nearly even in all three Summer Olympics yet always favored men athletes. While this slight difference could be explained in a number of ways, including that there are slightly more men's events and significantly more men competitors at the Olympics, it appears that the increase in women athletic coverage may have become stagnant in terms of clock time. For instance, many women's sports are now being highlighted more than ever (most notably, beach volleyball), yet this did not result in a net gain in clock time as it appears to be the result of decreased coverage of women's gymnastics (although it remains the overwhelming number-one women's event on air). Indeed, it appears that women are not being shown with any greater salience or frequency but are being shown in a somewhat wider range of sports than ever before.

Second, attractive sports, such as beach volleyball, appear to be on the upswing, specifically for women. While men received more coverage in beach volleyball in 2000 than they did in 2004, women's coverage increased exponentially. Part of this was likely the result of a highly skilled team, Misty May and Kerri Walsh, who won every match all year en route to a gold medal. Still, one has to note that part of the appeal of showing this event more frequently could reside in showing attractive women in swimsuits. The sexualized male gaze imparts a double standard within clock time differences, as the percentage of men athletes in sexualized situations (i.e., swimsuits/leotards) is not on the upswing nearly as much as for the women athletes. Such conclusions are consistent with Farrell's (1989) finding that male athletes are portrayed to be both "boyish" and "brash" and also with Daddario's (1998) claim that we prefer our women athletes to be elegant and sexualized.

Third, longitudinal trends in men's sports provide a much more cloudy view of the future, as two men's sports that received over an hour of coverage (basketball and cycling) appear to be on a downswing of popularity. The former might be explained by the lack of a dominant Dream team and NBC's increasing use of quick edits between sports (which isn't conducive to a two-hour basketball game), while the latter can be explained by the retirement of Lance Armstrong. It is hard to imagine an America as enraptured by cycling as it has been in the last eight years because of Armstrong.

Overall, this study provides an important and critical longitudinal snapshot of the media exposure variable within men's and women's sports telecasts. Predominantly, these snapshots offer valuable insights into where biases may occur before the action can be described. While scholars have rightly noted the biases enacted by sportscasters when depicting athletes of different genders, studies such as this one underscore the importance of a sporting event even being aired in the first place. The exposure variable is the first indicator of gender bias, with secondary frames regarding athletic strength, expertise, emotions, intelligence, and beyond only being of importance if the athletic event is aired within a megasporting event such as the Olympics. It is important to monitor these issues in the future, as the Olympics often set the standard for future sportscasts (note the rise in weekend beach volleyball coverage since the 2004 Summer Games) by providing the largest audience, the largest megasporting event, and the largest potential societal impact in televised sport.

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