

**Miss Olympic Athlete? A Content Analysis of  
NBC's Primetime Interviews During the 2016  
Summer Olympic Games**

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April 2017

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#### **ABSTRACT**

The 2016 Summer Olympic Games in Rio de Janeiro has further exposed the difference in sports reporting between sexes. Creating social media controversy, viewers called out the sexist commentary directed towards women athletes emphasizing their relationship status, how many children they have, and male athlete accomplishments over the female's athletic ability. This content analysis will dive deeper into NBC's prime-time coverage of the twenty-third Olympiad, examining the sport and non-sport questions brought up during interviews with the male and female athletes. With reporters possessing more control over what is discussed on-air, when compared to live commentators, the goal of this analysis is to examine if a significant difference of sport-related themes remains between sexes, or if a few outliers are drawing disproportionate attention. No significant difference was found between questions asked during interviews with male and female athletes, however, there was a significant difference found between the mean number of non-sport questions posed by male reporters when compared to female reporters. Suggestions for future research are also explored.

*Keywords: media effects, agenda setting, framing, Olympics, sport, gender*

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#### **INTRODUCTION**

“In a society where media is the most persuasive force shaping cultural norms, the collective message we receive is that a woman’s value and power lie in her youth, beauty, and sexuality” (Miss Representation, n.d.). Documentaries like *Miss Representation*, created by the founder of The Representation Project, have addressed the limited portrayals and underrepresentation of women in the media and brought this issue to the public’s attention.

This problem carries over to women athletes as the media focuses on the value of physical appearance, relationship status, etc. over a women’s athletic ability (CoverTheAthlete, 2015). Hashtags like #CoverTheAthlete and #AskHerMore have been created to call out this imbalance in the media and motivate individuals to challenge stereotypes. (Mission, n.d). Both campaigns have created viral videos that address this issue; #CoverTheAthlete even arranged an interview compilation to make it seem like reporters were asking male athletes the questions female athletes are presented with. The tagline: Male sports coverage would never sound like this. How come female coverage does? (CoverTheAthlete, 2015).

#### **Justification**

Inspired by the public outcry, both in the past and specifically with this summer’s Olympic Games, this content analysis centers around the primetime coverage of the 2016 Rio Olympics and examines the topics of discussion chosen by the NBC journalists when interviewing male and female athletes.

The media has a considerable influence on viewers’ perceptions of each day’s most salient issues (Bryant & Oliver, 2009). What they cover creates a framework for individuals to discuss and form their own opinions. Thus, what is given attention to and discussed in telecasts shows the

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public what to talk about and how to talk about it. This idea is called agenda setting theory. In the context of this study, the primetime coverage, or the daily, three-to-four hour highlights, represents the footage NBC has deemed the most entertaining and interesting for the masses. In return, the public believes it is the most important to watch.

During this time, viewers are also exposed to the framing of the coverage, or how the content is presented on each network (Angelini & Billings, 2010). Small differences in language used and reinforced throughout the reporting can influence how the public thinks of and/or how they talk about an event or an athlete. It is important to note that these agenda-setting and framing techniques are not malicious but used with the goal of higher ratings and higher advertising revenue in mind, however, they do have adverse effects, which is why analyzing this topic of gender portrayals in sports media is so important (Angelini & Billings, 2010). The goal of tracking the occurrence of sport talk- performance, career, inspiration, etc.- versus non-sport talk- family, hobbies, celebrities, etc.- during interviews with male and female athletes is to see if these predispositions carry over to what a sports reporter finds appropriate or essential to ask during an interview.

### ***Why the Olympic Games?***

The Olympic Games are a cultural phenomenon that evokes national pride and draws in millions of viewers every two years. Due to the tremendous following and national coverage the competition receives, the Summer and Winter Olympic Games have historically been a source of research when it comes to analyzing sporting events and what the media deems worthy of the public's attention.

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In a study conducted over a 20-year span from 1989-2009, it was found that women's sports coverage had slowly declined although women's participation in sports had increased.

Specifically, coverage dropped from 8.7 percent in 1999 to 6.3 percent in 2004 to 1.6 percent in 2009, the remaining coverage allotted to male sports (Messner & Cooky, 2010). This inequality of coverage impacts research, for example, Billings, Angelini, and Eastman's (2005) study of PGA and LPGA commentary had to code twice as many LPGA regular-season tournaments than PGA to balance the footage analyzed. This was due to the fact that fewer hours of the women events were even aired on the networks. A more balanced ratio of coverage of male and female sports is almost exclusively restricted to the Olympic Games.

This year, 58.5 percent of NBC's primetime telecast of the Olympics was allotted to women's sports; the second time women have received more coverage than men during the Olympic Games in the past of 22 years (Associated Press, 2016). Deserving of the coverage, 291 of the 544 member United States Olympic team were women, many of whom dominated their sports, bringing a total of 61 of the 121 medals back to their team (Myre, 2016).

### ***Why the National Broadcasting Company?***

NBCUniversal has produced each Summer Olympics since the 1988 Games in Seoul and every Winter Olympics since the 2002 Games in Salt Lake City (NBC Olympics, n.d.). Since 2002, the media company has held the United States media rights to all Olympic Games coverage on all platforms and will hold these rights until 2032. With this 2032 contract in place, NBC is on track to be the first United States media company to present 17 consecutive and 23 total Olympic Games (NBC Olympics, n.d.). This arrangement severely restricts when other networks can

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show Olympic footage and for how long, creating a reputation that NBC is the media outlet for United States coverage of the Olympic Games (NBC Olympics, n.d.).

#### ***Why primetime coverage?***

As mentioned above, the events that are aired on primetime are the highlights that NBC believes the most viewers will watch. The viewers during the 17-day primetime coverage of the 2016 Olympic Games reached 27.5 million across all media platforms, including digital streaming (Holloway, 2016). These ratings actually fell from 31.1 million primetime viewers for the 2012 Summer Olympics in London, which was deemed the most watched television event in United States history. However, NBC Sports Chairman, Matt Lazarus, stated “the primetime Olympics broadcast is still ‘the biggest game in town’” as NBC primetime coverage was still viewed 249% more than ABC, CBS, and Fox coverage combined (Holloway, 2016).

#### ***Why Athlete Interviews?***

The interviews conducted throughout Olympic coverage show a media-generated extension of the competition that emphasizes what viewers should take away from the athletes themselves and their overall athletic performance during a specific event. This means, opposed to play-by-play and color commentary, reporters have more control and the ability to spin the discussion with each particular athlete.

There is little research on the content of interviews conducted with Olympic athletes, and none examining differences in gender reporting, as most focus on commentary during competition.

Therefore, it is a valuable area to expand on in this study in order to contribute greater knowledge to the field.

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#### History and Background

In the realm of sports, women have always been at a disadvantage to men; whether this difference was in physicality, social acceptance of athleticism, or the whether they were provided with resources to play a sport. Following this, studies over the past thirty years have examined women's advance into the sports world.

Hargreaves (1994) categorized the phases of this breakthrough into three categories. During the first category, from 1896 to 1928, women were generally barred from sports participation. The second, 1928 to 1952, women athletes competing in 'gender appropriate' sports had become more accepted and there was a higher standard of skill. The third era, from 1952 to the present, is where people began to gradually question the traditional male-oriented label and embrace the female athlete. By constantly pushing the boundaries and competing at new levels, women continue to challenge the stereotypes surrounding female athletes. (Billings, 2008).

The differences in how sexes are portrayed in sports coverage have been a focus in sports studies since this breakthrough. Content analyses on Olympic coverage have been a large contributor to this research. Past examinations have addressed gender inequality, initially, through the overall time allotted during coverage and, more recently, the dialogue within that coverage. These discussions range from descriptions of athletes, gender biases, camera angles, gender labeling of events, and more. However, "regardless of approach, the spoken word within televised sport is frequently observed to manifest in a way that diminished the accomplishments of women athletes" (Angelini & Billings, 2010, p. 366).

There were controversial reports stemming specifically from the 2016 Olympics. The *Chicago Tribune* tweeted "Wife of a Bears' lineman wins a bronze medal today in Rio Olympics" when

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announcing three-time Olympian trap shooter, Corey Cogdell had received a bronze medal (chicagotribune, 2017, August 7). In another incident, BBC reporter John Inverdale, during a post-game interview with Andy Murray, overlooking the Olympic accomplishments of Venus and Serena Williams; crediting Murray as the first person to win two Olympic gold medals in tennis (Domonoske, 2016). “And there’s the guy responsible for turning Katinka Hosszu, his wife, into a whole different swimmer” was another controversial statement made by NBC announcer Dan Hicks about Hosszu’s husband and coach after her world record-breaking and gold medal performance in swimming (Bell, 2016). Unfortunately, these are not the only cases during the 2016 Games, or in the general female sports coverage, where female athletes’ accomplishments were undermined or ignored in the media.

## **LITERATURE REVIEW**

### ***Media Effects***

Across the multitude of studies examining the impact of sports media and Olympic coverage, agenda-setting and framing provide the groundwork. “...if Olympic viewers witness athletes of different genders being treated in dissimilar ways repeatedly in telecasts over a long period of time, such exposure could subsequently set the terms of a gendered debate in an altered way” (Billings, 2007, p. 331). Essentially, exposure to repeated messages from media outlets frames the information as important to watch leading to an adoption of those messages in a viewer’s everyday life.

### ***Women in Sports***

As mentioned, time on-air for sports coverage between men and women has been predominantly imbalanced, specifically favoring men’s sporting events. For example, USA Today reported that men’s PGA golf received 40 hours of weekend coverage on network television where women’s

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LPGA received only four hours on secondary networks (as cited in Billings, Angelini, & Eastman, 2005). Studying this further, Billings, Angelini, and Eastman (2005) observed that commentary for men's tournaments attributed their success to concentration and athletic ability where commentary for women noted their strength and luck.

Looking at college basketball announcing, Eastman Billings (2001) found that most commentary was alike, apart from comments on female athlete's family and coaches which were not prevalent in the male commentary.

Like female athletes, female reporters have also made the journey into the sports industry. Schmidt (2015) found participants conveyed sports reporting as a "boys club" where female reporters are still a "rare breed" (p.71). Because of this, women have struggled, in the past, to break into the industry with higher numbers of female reporters in recent years. Hardin, Dodd, and Lauffer (2006) found "women are unlikely to gain "expert" status (as writers, reporters, editors, and columnists) in regard to a realm so strongly deemed as male (players, coaches, owners)" (as cited in Baiocchi, 2009, p. 8). A study conducted by Baiocchi (2009) examined audience perceptions of male and female sports reporters. And although no significant difference between male and female credibility was found, higher expectations for female reporters to "prove their worth" to their organization, teams covered, and viewers was discussed (Baiocchi, 2009, p.1).

Studies in the field have continued to analyze time on air, commentary, sports labeling, online images, camera angles, and 'gender appropriate' coverage. Meân and Kassing (2008) and Reichart and Bissell (2009) looked into the reasoning behind the gender reporting inconsistencies discovered. They found that the commentary and discussions surrounding female sports are used

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to “[reinforce] the athlete’s femininity, rather than their athleticism” (Reichart and Bissell, 2009, p. 12). Messner (1988) brought up the question “can a woman be strong, aggressive, competitive, and still feminine?”; Meân and Kassing (2008) and Reichart and Bissell (2009) would argue that the media works to ‘fix’ that inconsistency (Messner, 1988, p. 203). Commentary that reduces accomplishments, focuses attention or credit onto men, etc., all reinforce the female athlete’s femininity and share that message with viewers.

Focusing specifically on 2010 Olympic hockey, Poniatowski and Hardin (2012) found that women were compared to their male counterparts and praised for originally beginning their careers in men’s hockey, emphasizing the idea that hockey is still a male dominated sport and women are attempting to catch up. As a violent sport, generally viewed as masculine, women playing hockey contradicts the idea of ‘sex-appropriate’ sports.

### ***Olympics and Gender***

Like in Poniatowski and Hardin’s (2012) work, the variances of gender representation in sports coverage are focused on within research of Olympic coverage. Originally, this research analyzed the time allocated to each sex throughout the Games. Clock-time began with significantly more coverage of male Olympic sports but, as time and female athlete success increased, overall coverage has moved closer to equilibrium.

In a University of Alabama press release, Dr. Andrew Billings analyzed the NBC primetime broadcast of the 2014 Winter Olympics in Sochi and found male athletes received 45.4 percent of coverage, female athletes received 41.4 percent, and pairs received 13.2. This is, once again, an improvement from the average 20 percent gap between male and female primetime coverage found during the 1994-2010 Olympic Games. It is important to note a more even proportion

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between total male and female coverage was found, not necessarily even coverage between specific sports. (The University of Alabama, 2014)

With these findings, researchers began to shift focus from time to content. Specifically, Ličen and Billings (2013) emphasized that although male and female sports are allotted similar primetime coverage, the content within the coverage may not be that similar. “In television broadcasts of sports events, announcers provide spectators with more than a restatement of what they just saw: they embellish the drama and actively shape the viewers’ perceptions of the action” (Ličen & Billings, 2013, p. 381). Weiller, Higgs, and Greenleaf (2004) discussed this further when they proposed that commentary about personal lives and emotions of both male and female athletes was a prevalent topic that was found consistently equal for men and women (p. 16).

Billings, Angelini, and Eastman (2005) and Billings (2007) discuss how commentary during sports differs slightly depending on the type of sport, how the sport is judged, or whether it is perceived as androgynous or gendered. Specifically, Billings (2007) found that sports that utilized judges scores, like gymnastics, were more likely to have gender biased commentary than sports based on best time, like swimming or track.

Continuing this in later work, Angelini and Billings (2010) examined the five sports that received the most primetime coverage, over 90 percent, during the 2008 Olympic Games: gymnastics, swimming, diving, track and field, and beach volleyball. Some prominent findings were that diving had no significant differences in commentary between male and females. And beach volleyball had the largest differences, where female athletes received more comments attributing success to experience and luck where their male counterparts’ success was attributed

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to athletic ability and intelligence. From a camera angle perspective, Reichart Bissell (2009) studied the 2008 Olympic beach volleyball coverage, specifically, and found no significant difference between male and female coverage. However, they did observe more broadcast time attributed to the women's teams.

Ličen and Billings (2013) found the proportion of verbal descriptors used within commentary during the Slovenian coverage of the 2008 Summer Olympics was also reasonably equal: 56 percent male, 42 percent female, and 2 percent gender neutral. However, like in other studies, the verbal descriptors themselves differed between genders.

Eastman and Billings' (2001) literature review deliberated about announcers own unconscious biases that could slip out in the spontaneity of the color commentary, yet, Angelini and Billings (2007) found no relation; explicitly, they compared the prevalence of gender biased statements in scripted in-studio announcing compared to more dynamic commentary on location. There was no difference found between the two announcing formats in regards to this unconscious bias influence (Billings and Angelini, 2007).

As previously mentioned, there have been a limited amount of studies analyzing Olympic interviews. Lee, et al. (2009), however, found that interviews conducted with Olympic athletes portray a cultural identity, individualistic or collectivistic, to the public, highlighted by the athlete's levels gratitude and apology in their responses. Although this specific topic is not in line with the gender studies subject, it still demonstrates the effectiveness of examining interviews for Olympic Games research. The content aired during an interview is more personalized due to the nature of the direct two-party communication and the channel still allows for the messages brought up to be shared with, in this case, the tens of millions of Olympic viewers.

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Overall, when comparing sports coverage by gender, the media is making their way towards an equilibrium, particularly when it comes to the Olympic Games. Time allotted to each sport is now on a level playing field, yet, after examining the content aired within that time, gender biases have still been found. Continuing this research into interview content is the next step.

## **RESEARCH QUESTIONS**

Combining elements from the studies above, this research will examine NBC's primetime Olympic coverage and the potential gender differences in sports reporting with a focus on the sex of both athletes and reporters. Separating this research from past Olympic content studies is, again, the investigation of interviews specifically. Additionally, attention will be assigned to the questions posed by the reporters instead of the responses given by the athletes, differing from Lee, et al. (2009) research on Olympic interviews.

**Hypothesis:** Reporters ask significantly more sport related questions during interviews with male Olympic athletes compared to female Olympic athletes.

**Research Question 1:** Is there a significant difference in the mean number of sport questions posed by male reporters when compared to female reporters?

**Research Question 2:** Is there a significant difference in the mean number of non-sport questions posed by male reporters when compared to female reporters?

## **METHODOLOGY**

The following methodology and statistical analysis are commonly used and recommended for investigations of this nature, corroborated by literature reviews as well as common practices in the communication field.

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#### Data Collection

All data was gathered from the official NBC Olympic website, [www.nbcolympics.com](http://www.nbcolympics.com) using primetime streaming and videos uploaded to the site as well as a schedule of the primetime events aired on each day for reference (see Appendix A).

A total of 50 primetime interviews were collected over the course of the 15 days of competition coverage, excluding the Opening and Closing Ceremonies or Day 0 and Day 16, respectively. Out of the total interviews, 23 held were with male athletes and 27 were with female athletes. From the interviewer perspective, 18 interviews were conducted by a male reporter and 32 were by a female reporter. Because these interviews were collected throughout the Games, they were conducted under a variety of circumstances including qualifying, semi-final, and gold medal final rounds as well as with athletes who were successful and unsuccessful in achieving their competition goals.

Interviews were considered any post-event or in-studio discussion between an athlete or athletes and an NBC employee. Due to the focus on the questions posed by a reporter in this study and the concentration on the sex of reporter in Research Question one and two, pre-produced profiles were not considered 'interviews' as the questions and the reporter themselves were usually excluded from the final cut.

#### Limitations

##### *Data Collection*

Originally, the intended data collection methodology was to stream the full primetime coverage from each day on [nbcolympics.com](http://nbcolympics.com), separate all of the interviews that occurred, and randomly select videos to code. Online streaming was deemed the ideal form of content storage because of

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the ability to access the source from multiple locations. This plan was, unfortunately, interrupted during this process as the primetime episodes were removed from the website and were no longer available to stream. Because of this, data collection of the interviews still remaining was limited.

The solution was to collect interview videos still remaining on the website that had been previously clipped from the overall primetime stream using the primetime event schedule and known primetime reporters as a guide to ensure all interviews collected had aired during the primetime coverage.

### ***Reporter Imbalance***

Another limitation, discovered after interview collection, was the ratio of male and female primetime reporters. Out of the 50 interviews collected, five of the reporters were female and only two were male. Swimming events covered by female NBC reporter, Michele Tafoya, had the most interview attention, which also plays a role in enlarging the 18 to 32 split between the number of interviews conducted by male to female reporters. It is important to understand that two male reporters do not represent the population, which could lead to potential inconsistencies in reliability due to a single male reporters' particular interview style.

As mentioned in the results, both of these limitations restricted some of the comparisons that were able to be made between groups because gender groupings were not even and the sample size was smaller. This should be taken into consideration when evaluating the results.

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#### Content Analysis: Coding and Reliability

Content analyses, a type of textual analysis, are one of the few commonly utilized methods of communication research and were established to examine occurrences of specific mass-mediated messages (Dainton & Zelley, 2015). The detail and perspective of content analyses allow for the examination of qualitative communication tendencies using quantitative codes that can be statistically analyzed (Colorado State University, 2004).

Through an initial detailed instruction, two coders were trained to place a tally in the appropriate sport or non-sport category for each question or leading statement posed by an NBC reporter. Each tally represented one single question or leading statement, therefore, multifaceted and follow-up questions were counted in addition to the original question. In this case, a leading statement is considered a sentence that is not grammatically a question but is still used to evoke a response from the athlete, i.e., "...tell me about that" or "...compare the experience." The coders were also instructed to only track the NBC employee's contribution as they were the ones who possessed the control to set and frame the interview. For each interview, the coders were given a form to record the video number, sex of the athlete, sex of the reporter, sport of the athlete, and sport and non-sport categories asked (see Appendix B).

The sport and non-sport categories were each split up into six sub-sections to assist accurate coding. Sport related questions were categorized as (1) inspiration (i.e., other athletes, role models, motivation for competing in the sport); (2) competitors (i.e., relationship, how the athlete matched up); (3) career (i.e., past Olympic or competition performance, training, future plans); (4) performance (i.e., event recap, strategy, goals, mindset, emotion during event, records); (5) team (i.e., relationship with, support from coach and teammates); and (6) other. Non-sport

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related questions comprised of (1) family (i.e., parents, spouse, children); (2) life outside of training (i.e., hobbies, personality, growing up); (3) life in the Olympic Village (i.e., experience, food, watching other events, sleep); (4) competitor drama (i.e., scandals, intimidation tactics); (5) fame (i.e., followers on social media, celebrity contact, hometown viewers); and (6) other.

In order to ensure the data gathered would be replicable and accurate, and therefore sound, an inner coder reliability test was conducted prior to official coding for the study. Ten interviews conducted during the Rio Olympic trials or outside of primetime coverage were given to both coders to run an analysis. A president of an 80 percent minimum inner-coder reliability was set. An 81 percent reliability was found, therefore, 81 percent of the categories assigned by the coders was the same.

All of the categories were mutually exclusive. However, some categories required further clarification after the test to ensure clear and consistent coding going forward; specifically, the difference between career and performance and situations where a competitor was also a teammate. It was set that performance was during the 2016 Olympic Games and career was outside and a teammate was only considered a competitor when participating in the same event the interviewee was being questioned about. The coders were then each sent 25 randomly assigned, primetime, Rio Olympics interviews with an equal split between sex of athlete and reporter (see Appendix C).

### **Statistical Analysis**

Because there were two groups of information being compared an independent-samples t-test was the appropriate statistical analysis chosen. This tested whether there is a statistically significant difference in the means of the two groups compared.

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Towards the end of the two weeks, there was a scandal involving Ryan Lochte and other members of the United States Olympic swim team lying about being robbed at gunpoint by Brazilian police. An interview with Lochte and Matt Lauer was aired as an apology for the swimmer's actions. This interview was removed from the statistical analysis as an outlier as it was closer to celebrity news than an athlete interview.

## **RESULTS**

The hypothesis stated that reporters asked male athletes significantly more sport related questions than female athletes. Therefore, the dependent variable was sport and non-sport questions and the independent variable was athlete sex. Results of Levene's test for Equality of variances indicated that equal variances were assumed. There was no significant difference found between sport questions posed to male athletes ( $M=22$ ,  $SD=2.19$ ) and female athletes ( $M=28$ ,  $SD=2.32$ ;  $t(48)=-.54$ ,  $p=.589$ , two-tailed) and no significant difference found between non-sport questions posed to male athletes ( $M=22$ ,  $SD=.67$ ) and female athletes ( $M=28$ ,  $SD=1.33$ ;  $t(41.56)=-1.06$ ,  $p=.296$ , two-tailed).

Research question one asked if there was a significant difference in the mean number of sport related questions posed by male and female reporters. Therefore, the dependent variable was sport questions and the independent variable was reporter sex. Results of Levene's test for Equality of variances indicated that equal variances were not assumed. There was no significant difference found between sport questions posed by male athletes ( $M=4.06$ ,  $SD=3.17$ ) and female athletes ( $M=2.50$ ,  $SD=1.24$ ;  $t(19.99)=2.00$ ,  $p=.06$ , two-tailed).

Research question two asked if there was a significant difference in the mean number of non-sport related questions posed by male and female reporters. Therefore, the dependent variable

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was non-sport questions and the independent variable was reporter sex. Results of Levene's test for Equality of variances indicated that equal variances were not assumed. There was a significant difference found between non-sport questions posed by male reporters (M=1.11, SD=1.53) and female reporters (M=.28, SD=.58;  $t(19.80)=2.21$ ,  $p=.03$ , two-tailed).

Frequencies of this data were not considered because of uneven counts between male and females. However, the counts and ratios within genders are included to elaborate on the relationships (See Appendix D).

## **DISCUSSION**

### Results Breakdown

Similar to findings in Olympic studies conducted in recent years, this research falls in the more recent trend of overall consistent reporting between male and female athletes. Because of the smaller sample size and less male reporters, comparing frequencies is not possible, yet the balance is more apparent in the sport and non-sport ratios.

Although not specifically focused on in this study, a breakdown of the specific categories and the proportion of questions from each is included in Appendix D.

Hypothesis Statistics			
Athlete Sex		Sport	Non-Sport
Male	mean	2.86	.41
	sum	66	9
Female	mean	3.21	.71
	sum	86	20

Hypothesis Ratios		
Athlete Sex	Sport	Non-Sport
Male	88%	12%
Female	81%	19%

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With a significance level of .06, there is no significant difference between the means of sport questions, however, there is an observed difference. Male reporters, on average, asked about four sport questions per interview where female reporters asked slightly over half that, as seen in the chart below.

Research Question 1 Statistics		
Reporter Sex		Sport
Male	mean	4.06
	sum	73
Female	mean	2.5
	sum	80

Research Question 1 Ratios	
Reporter Sex	Sport
Male	78%
Female	90%

Research Question 2, as mentioned, was found to have a statistically significant difference.

Comparing the means in the chart below, male reporters, on average ask about one non-sport question per interview where female reporters, on average, ask almost no non-sport questions (0.28). These results were also surprising, not only because male reporters asked more non-sport questions but because female reporters asked almost none.

Breaking down the non-sport questions asked by male reporters, 25 percent were posed to male athletes and 75 percent were posed to female athletes. Therefore, the male reporters asked three times the number of non-sport questions to female athletes throughout the primetime coverage.

Research Question 2 Statistics		
Reporter Sex		Non-Sport
Male	mean	1.11
	sum	20
Female	mean	0.28
	sum	9

Research Question 2 Ratios	
Reporter Sex	Non-Sport
Male	22%
Female	10%

### Result Influences

Considering these findings there are some influences that play into the results. Addressing the significant difference in the number of non-sport questions asked by male reporters, male

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reporters could still be subconsciously asking more non-sport questions. Especially when interviewing female athletes. Eastman and Billings (2001) discussed how biases residing in reporter's subconscious attitudes could lead to frames shaping content that goes unnoticed by the media producers themselves.

One particular example, from the interviews collected, was an interview with United States Gymnasts, Aly Raisman and Simone Biles, conducted by Bob Costas. Almost half of the questions in this interview were spent discussing twitter fame, celebrity Zac Efron's visit to Rio, and post-Olympic diet. One specific question asking, "We know you're going out, we know you're [going to] have some more pizza, some more fries, some more burgers. Is Zac [going to] hang out with you?" (Raisman & Biles, August 16, 2016).

Another influence could be from the fact that female reporters are still making a name for themselves, with goals of being taken seriously and remaining professional in the coveted, well-respected primetime slot, and refrained from asking non-sport questions. Referring back to Baiocchi's (2009) discussion, female reporters had been found to have to establish their credibility as sports reporters in the male dominated industry.

As mentioned in the research limitations, Bob Costas' in-studio reporting may have an influence on the results as well, considering there is no female in-studio counterpart. Similar to Angelini and Billings (2007) work comparing scripted in-studio commentary to spontaneous, event commentary, this would be a topic to consider in future research.

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#### **FUTURE RESEARCH**

As acknowledged through studies in the past, analyses of sports coverage, in this case, specifically during the Olympic Games, are an important way to track trends in media reporting over the years. In order to do this for athlete interviews, additional studies on the past and future Olympic Games should be conducted. Again, one specific aspect of this study that was unable to be examined was Bob Costa's in-studio interviewing style and whether it influenced the male reporting data. Branching off of this research, however, there are still opportunities to analyze other aspects of the Olympics.

Steven Petrow of *The Washington Post* discussed the current restrictions on transgender athletes in regards to Olympic regulations and public opinion (Petrow, 2016). As more and more athletes come out as transgender and the rules allow for more transgender competition, it would be important to analyze the scope of Olympic commentary or news coverage for these athletes. From a gender perspective, it would be intriguing to analyze the content to see if reporters ask questions similar to athletes of their birth sex or their gender identity.

As viewership and engagement, through online streaming and social media, of the Olympic Games grows, so does the popularity of the athletes. NBC adds to this celebrity by creating storylines through pre-produced clips for Olympic viewers to get to know the athletes' personal lives and training schedule. Similar to interviews, networks have the ability to highlight certain aspects of the athlete that they believe is salient or most entertaining. Because of this, it would be interesting to look into whether topics emphasized in these pre-produced clips differ between male and female athletes.

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#### **CONCLUSION**

Asking non-sport questions in athlete interviews will always occur as a way for viewers to learn more about the athlete's lives and how they got to where they are today. However, some questions stray farther away from the achievements of Olympians appropriate for primetime coverage and would be more suitably aired during the Today Show or late-night Olympic coverage. This is the case particularly if gender bias between frequency is prevalent.

Throughout history and still embedded in our culture today, sports are male dominated and athleticism is considered a masculine attribute. Because of this, it is important to continue researching sports reporting and media coverage to track progress, or lack thereof, and address when gender biases remain. For viewers of mediated sports coverage, being aware of these influences increases media literacy and empowers them to analyze mediated content as opposed to just accepting the messages as they are presented. For reporters, being aware that their words and topic choices, even if unintentional, have an impact on their viewers can make them more conscious of the messages they are perpetuating into American culture.

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#### **APPENDICES**

##### Appendix A – NBC Primetime Schedule (Hipes & Patten, 2016)

*An asterisk (\*) next to an event signifies an analyzed interview was conducted after the event. An asterisk next to a specific day signifies an analyzed in-studio interview was aired that night. Some asterisks account for more than one interview.*

#### **DAY 1: AUGUST 6, 8:00PM-12:00AM \***

Gymnastics – Men’s Team Competition

Swimming – Men’s 400m Individual Medley – Gold Medal Final

Men’s 400m Freestyle – Gold Medal Final

Women’s 400m Individual Medley – Gold Medal Final

Women’s 100m Butterfly – Semifinals

Men’s 100m Breaststroke – Semifinals \*

Women’s 4x100m Freestyle Relay – Gold Medal Final \*

Beach Volleyball – Women’s, Walsh Jennings/Ross (U.S.) vs. Artacho Del Solar/Laird (Australia)

#### **DAY 2: AUGUST 7, 7:00PM-12:00AM**

Diving – Women’s Springboard Synchronized Final \*

Gymnastics – Women’s Team Competition \*

Swimming – Women’s 100m Butterfly – Gold Medal Final \*

Men’s 200m Freestyle – Semifinals \*

Women’s 100m Backstroke – Semifinals

Men’s 100m Breaststroke – Gold Medal Final

Women’s 400m Freestyle – Gold Medal Final

Men’s 100m Backstroke – Semifinals

Men’s 4x100m Freestyle Relay – Gold Medal Final \*

#### **DAY 3: AUGUST 8, 8:00PM-12AM**

Diving – Men’s Platform Synchronized Gold Medal Final

Gymnastics – Men’s Team Gold Medal Final

Swimming – Women’s 200m Freestyle – Semifinals

Men’s 200m Freestyle – Gold Medal Final

Women’s 100m Backstroke – Gold Medal Final

Men’s 100m Backstroke – Gold Medal Final

Women’s 100m Breaststroke – Gold Medal Final

Men’s 200m Butterfly – Semifinals \*

Women’s 200m Individual Medley – Semifinals

Beach Volleyball – Women’s, Walsh Jennings/Ross (U.S.) vs. Wang/Yue (China)

#### **DAY 4: AUGUST 9, 8:00PM-12:00AM**

Diving – Women’s Platform Synchronized Gold Medal Final

Gymnastics – Women’s Team Gold Medal Final \*

Swimming – Men’s 100m Freestyle – Semifinals \*

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Women's 200m Freestyle – Gold Medal Final \*  
Men's 200m Butterfly – Gold Medal Final  
Women's 200m Butterfly – Semifinals  
Men's 200m Breaststroke – Semifinals  
Women's 200m Individual Medley – Gold Medal Final  
Men's 4x200m Freestyle Relay – Gold Medal Final \*

#### **DAY 5: AUGUST 10, 8:00PM-12:00AM**

Beach Volleyball – Women's, Walsh Jennings/Ross (U.S.) vs. Forrer/Verge-Depre  
(Switzerland)

Swimming – Men's 200m Breaststroke – Gold Medal Final  
Women's 100m Freestyle – Semifinals  
Men's 200m Backstroke – Semifinals \*  
Women's 200m Butterfly – Gold Medal Final  
Men's 100m Freestyle – Gold Medal Final  
Women's 200m Breaststroke – Semifinals  
Men's 200m Individual Medley – Semifinals \*  
Women's 4x200m Freestyle Relay – Gold Medal Final  
Gymnastics – Men's Individual All-Around Gold Medal Final

#### **DAY 6: AUGUST 11, 8:00PM-12:00AM \***

Gymnastics – Women's Individual All-Around Gold Medal Final  
Swimming – Men's 50m Freestyle – Semifinals  
Women's 200m Breaststroke – Gold Medal Final  
Men's 200m Backstroke – Gold Medal Final  
Women's 200m Backstroke – Semifinals \*  
Men's 200m Individual Medley – Gold Medal Final  
Women's 100m Freestyle – Gold Medal Final \*  
Men's 100m Butterfly – Semifinals \*

#### **DAY 7: AUGUST 12, 8:00PM-12:00AM**

Track & Field – Qualifying Rounds  
Women's Shot Put – Gold Medal Final  
Swimming – Women's 200m Backstroke – Gold Medal Final  
Men's 100m Butterfly – Gold Medal Final \*  
Women's 800m Freestyle – Gold Medal Final \*  
Men's 50m Freestyle – Gold Medal Final \*  
Women's 50m Freestyle – Semifinals \*  
Diving – Women's Springboard Qualifying \*  
Beach Volleyball – Women's Round of 16

#### **DAY 8: AUGUST 13, 8:00PM-12:00AM**

Track & Field – Men's Long Jump – Gold Medal Final  
Men's 10k – Gold Medal Final  
Women's 100m – Semifinals and Final

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#### Women's Heptathlon

Swimming – Women's 50m Freestyle – Gold Medal Final  
Men's 1500m Freestyle – Gold Medal Final \*  
Women's 4x100m Medley Relays – Gold Medal Final \*  
Men's 4x100m Medley Relays – Gold Medal Final  
Diving – Women's Springboard Semifinal  
Beach Volleyball – Round of 16

#### **DAY 9: AUGUST 14, 7:00PM-12:00AM**

Diving – Women's Springboard Gold Medal Final \*  
Track & Field – Gold Medal Finals: Women's Triple Jump  
Men's 400m  
Men's 100m \*  
Gymnastics – Individual Event Gold Medal Finals: Men's Floor  
Women's Vault  
Men's Pommel Horse  
Women's Bars  
Beach Volleyball – Women's Quarterfinal

#### **DAY 10: AUGUST 15, 8:00PM-12:00AM \***

Track & Field – Gold Medal Finals: Men's Pole Vault  
Men's 800m  
Women's 400m \*  
Gymnastics – Individual Event Gold Medal Finals: Men's Rings  
Men's Vault  
Women's Balance Beam \*  
Diving – Men's Springboard Qualifying

#### **DAY 11: AUGUST 16, 8:00PM-12:00AM \***

Track & Field – Gold Medal Finals: Men's High Jump  
Women's 1500m  
Men's 110m Hurdles  
Gymnastics – Individual Event Gold Medal Finals: Men's Parallel Bars  
Women's Floor \*  
Men's High Bar \*  
Beach Volleyball – Women's Semifinal \*

#### **DAY 12: AUGUST 17, 8:00PM-12:00AM**

Track & Field – Gold Medal Finals: Women's Long Jump  
Women's 200m  
Women's 100m Hurdles \*  
Diving – Women's Platform Qualifying  
Beach Volleyball – Women's Gold Medal Final

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#### **DAY 13: AUGUST 18, 8:00PM-12:00AM**

Track & Field – Gold Medal Finals: Men’s Shot Put

Women’s Javelin

Men’s 1500m Decathlon \*

Women’s 400m Hurdles \*

Men’s 200 \*

Volleyball – Women’s Semifinal

Diving – Women’s Platform Gold Medal Final

Beach Volleyball – Men’s Gold Medal Final

#### **DAY 14: AUGUST 19, 8:00PM-10:30AM**

Track & Field – Gold Medal Finals: Women’s Pole Vault

Men’s Hammer

Women’s 5000m

Women’s 4x100m Relay

Men’s 4x100m Relay \*

Diving – Men’s Platform Qualifying

#### **DAY 15: AUGUST 20, 8:00PM-12:00AM \***

Track & Field – Gold Medal Finals: Women’s High Jump

Men’s Javelin

Men’s 1500m \*

Women’s 800m

Men’s 5000m \*

Women 4x400m Relay \*

Men 4x400m Relay

Volleyball – Women’s Gold Medal Final \*

Diving – Men’s 10m Platform Gold Medal Final

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#### Appendix B – Content Analysis Form

- 1) \_\_\_\_\_ Video Number
- 2) \_\_\_\_\_ Athlete Sex 0: Male 1: Female
- 3) \_\_\_\_\_ Interviewer Sex 0: Male 1: Female
- 4) \_\_\_\_\_ Sport 0: Swimming 1: Track & Field 2: Gymnastics 3: Diving 4: Beach Volleyball 5: Volleyball

#### Rio Olympic Interview Analysis

*Once a question or leading statement is asked, place a tally mark below the appropriate category. One tally should be assigned to each sentence ending with a question or leading statement. Therefore, multifaceted and follow-up questions should be counted in addition to the original question.*

#### Sport Related Questions

- 1: Inspiration (*other athletes, role models, motivation for competing in the sport*)
- 2: Competitors (*relationship, how the athlete matched up*)
- 3: Career (*past Olympic or competition performance, training, future plans*)
- 4: Performance (*event recap, strategy, goals, mindset, emotion during event, records*)
- 5: Team (*relationship with, support from coach and teammates*)
- 6: Other

#### Non-Sport Related Questions

- 1: Family (*parents, spouse, children*)
- 2: Life Outside of Training (*hobbies, personality, growing up*)
- 3: Life in the Olympic Village (*experience, food, watching other events, sleep*)
- 4: Competitor Drama (*scandals, intimidation tactics*)
- 5: Fame (*followers on social media, celebrity contact, hometown viewers*)
- 6: Other

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#### Appendix C – Coded Interview Breakdown

<b>Videos Assigned to Each Coder</b>			
	<b>Coder 1</b>	<b>Coder 2</b>	<b>Total</b>
<i>F-F</i>	9	9	<b>18</b>
<i>F-M</i>	4	5	<b>9</b>
<i>M-F</i>	7	7	<b>14</b>
<i>M-M</i>	5	4	<b>9</b>
<b>Total</b>	<b>25</b>	<b>25</b>	<b>50</b>

#### KEY

*F-F* = female athlete and female interviewer

*F-M* = female athlete and male interviewer

*M-F* = male athlete and female interviewer

*M-M* = male athlete and male interviewer

#### Appendix D – Interview Question Topic Breakdown

<b>Total Male Athlete Questions</b>	<b>75</b>	
<b>Sport</b>	66	88%
Inspiration	4	5%
Competitors	3	4%
Career	15	20%
Performance	37	49%
Team	6	8%
Other	1	1%
<b>Non-Sport</b>	9	12%
Family	5	7%
Outside Train	0	0%
In Olympics	0	0%
Drama	0	0%
Fame	3	4%
Other	1	1%

<b>Total Female Athlete Questions</b>	<b>106</b>	
<b>Sport</b>	86	81%
Inspiration	4	4%
Competitors	8	8%
Career	13	12%
Performance	45	42%
Team	15	14%
Other	1	1%
<b>Non-Sport</b>	20	19%
Family	2	2%
Outside Train	8	8%
In Olympics	0	0%
Drama	0	0%
Fame	9	8%
Other	1	1%

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#### **REFERENCES**

- Angelini, J. R., & Billings, A. C. (2007). Packaging the Games for Viewer Consumption: Gender, Ethnicity, and Nationality in NBC's Coverage of the 2004 Summer Olympics. *Communication Quarterly*. 55(1), 95-111.
- Angelini, J. R., & Billings, A. C. (2010). An Agenda That Sets the Frames: Gender, Language, and NBC's Americanized Olympic Telecast. *Journal of Language and Social Psychology*. 29(3), 363-385.
- Associated Press (2016, August 15). NBC is all about the women these Olympics. *New York Post*. Retrieved from <http://nypost.com/2016/08/15/nbc-is-all-about-the-women-these-olympics/>
- Baiocchi, E. (2009). Audience Perceptions of Female Sports Reporters: A Social Identity Approach. *Conference Papers – National Communication Association*. 1.
- Bell, J. (2016, August 6). 2016 Rio Olympic Prime-time Coverage [Television broadcast]. New York, NY: National Broadcasting Company Universal.
- Billings, A. C. (2007). From Diving Boards to Pole Vaults: Gendered Athlete Portrayals in the "Big Four" Sports at the 2004 Athens Summer Olympics. *Southern Communication Journal*. 72(4), 329-344.
- Billings A. C., Angelini J. R., & Eastman, S. T. (2005). Diverging Discourses: Gender Differences in Televised Golf Announcing. *Mass Communication & Society*. 8(2), 155-171.
- Bryant, J. and Oliver, M. B. (2009). *Media Effects Advances in Theory and Research* (3<sup>rd</sup> e.d.). New York: Routledge.
- chicagotribune. (2017, August 7). Wife of a Bears' lineman wins a bronze medal today in Rio Olympics. Retrieved from <https://twitter.com/chicagotribune/status/762401317050605568>
- Colorado State University (2004). Content Analysis. Retrieved from <http://www.umsl.edu/~wilmarthp/mrpc-web-resources/content-analysis.pdf>
- CoverTheAthlete. (2015, October 28). #CoverTheAthlete. [Video File]. Retrieved from <https://youtu.be/OI9VhBDKZs>
- Dainton, M. & Zelle, E. D. (2015). *Applying Communication Theory for Professional Life: A Practical Introduction* (3rd Ed.) Thousand Oaks, CA: Sage.
- Domonoske, C. (2016, August 15). WATCH: Andy Murray Reminds Interviewer That Women Win Gold, Too. *National Public Radio*. Retrieved from <http://www.npr.org/sections/thetorch/2016/08/15/490056480/watch-andy-murray-reminds-interviewer-that-women-win-gold-too>
- Eastman, S. T., & Billings, A. C. (2001). Biased Voices of Sports: Racial and Gender Stereotyping in College Basketball Announcing. *The Howard Journal of Communications*. 12, 183-201.
- Hipes, P. and Patten, D. (2016, August). Rio Olympics TV Schedule: What And Where To Watch. *Deadline*. Retrieved from <http://deadline.com/2016/08/olympics-2016-tv-schedule-dates-upcoming-events-1201798870>
- Holloway, D. (2016, August 23). How Rio Ratings Surprised NBC and Will Impact Future Olympics. *Variety*. Retrieved from <http://variety.com/2016/tv/news/2016-olympics-ratings-rio-nbc-1201843200/>

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---

- Lee, S., Park, H. S., Liu, X., Imai, T., Hong, S., Shin, H. B., & ... Guan, X. (2009). Gratitude and Apology in Olympic Athlete Interviews. *Conference Papers - International Communication Association*, 1-18.
- Ličen, S., & Billings, A. C. (2013). Cheering for ‘our’ champs by watching ‘sexy’ female throwers: Representation of nationality and gender in Slovenian 2008 Summer Olympic television coverage. *European Journal of Communication*. 28(4), 379-396.
- Meân, L. J., & Kassing, J. W. (2008). “I Would Just Like to be Known as an Athlete”: Managing Hegemony, Femininity, and Heterosexuality in Female Sport. *Western Journal of Communication*. 72, 126-144.
- Messner, M. A. (1988). Sports and Male Domination: The Female Athlete as Contested Ideological Terrain. *Sociology of Sport Journal*. 5, 197-211.
- Messner, M. A. and Cooky, C. (2010). Gender in Television Sports News and Highlights Shows, 1989-2009. *Center for Feminist Research*. 1-35.
- Miss Representation (n.d.) *The Representation Project*. Retrieved from <http://therepresentationproject.org/film/miss-representation/about-the-film/#synopsis>
- Mission (n.d). *The Representation Project*. Retrieved from <http://therepresentationproject.org/about/>
- Myre, G. (2016, August 21). U. S. Women Are The Biggest Winners At The Rio Olympics. *National Public Radio*. Retrieved from <http://www.npr.org/sections/thetorch/2016/08/21/490818961/u-s-women-are-the-biggest-winners-in-rio-olympics>
- NBC Olympics (n.d.). NBC Universal. Retrieved from <http://www.nbcuniversal.com/business/nbc-olympics>
- Poniatowski, K., & Hardin, M. (2012). “The More Things Change, the More They...”: Commentary During Women’s Ice Hockey at the 2010 Olympic Games. *Mass Communication and Society*. 15, 622-641.
- Raisman, A. and Biles, S. (August 16, 2016). Interview by B. Costas. Primetime 2016 Olympic Games. [Television Broadcast]. Retrieved from <http://www.nbcolympics.com/video/aly-raisman-simone-biles-future-olympic-plans-zac-efron>
- Reichart, L., & Bissell, K. (2009). Nice Dig!: An Analysis of the Verbal and Visual Coverage of Men’s and Women’s Beach Volleyball During the 2008 Olympic Games. Paper submitted to the Popular Communication Division.
- Schmidt (2015). “Still a Boys Club”: Perspectives on Female Sports and Sports Reporters in University Student Newspapers. *Qualitative Research Reports in Communication*. 16(1), 65-74.
- The University of Alabama. (2014). *UA Researcher Finds Gender Gap in Olympic Coverage is Narrowing* [Press Release]. Retrieved from <http://uanews.ua.edu/2014/02/ua-researcher-finds-gender-gap-in-olympic-coverage-is-narrowing/>
- Weiller, K., Higgs, C., & Greenleaf, C. (2004). Analysis of Television Media Commentary of the 2000 Olympic Games. *Media Report to Women*. 32(3), 14-21.