

A Content Analysis of The Globe and Mail Sports Section Coverage
of the Winter Olympic Games

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In partial fulfilment of course P.E. 5901, Master's Thesis

By
© Jim Urquhart, B.P.H.E.
Advisor: Dr. Jane Crossman
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Abstract

The purpose of this research was to collect empirical data on the Globe and Mail sports section coverage of the Modern Winter Olympic Games from 1924 to 1992; focusing on the coverage of male and female athletes in relation to Winter Olympic participation rates. All Globe and Mail newspapers (177) printed that transpired during the Winter Olympic Games time frame were analyzed. Content Analysis was performed on 1,184 articles and 532 pictorials appearing in the Globe and Mail that related to the Winter Olympic Games. Variables used to examine text and pictorials included: size, gender reported/depicted, sport, location, type, performance reported, affiliation and source of article. Frequency counts and percentages were used to compare the coverage of male and female athletes. One-way ANOVA and ANOVA with a Student-Newman-Keuls procedure were used to determine if significant differences existed between the above indices. The study revealed that the Globe and Mail coverage of the Winter Olympic Games underrepresented female athletes compared to male athletes, used few female sport journalists, and often depicted women in "sex appropriate" sports. In this study it was discovered that male Winter Olympic athletes are written about four (647 to 144) times as much-and photographed three (346 to 131) times as much as their female counterparts. Coverage of male and female athletes did not correlate with participation rates of male and female athletes. Articles were written by male reporters almost six (431 to 75) times more frequently than female reporters. The mean size of articles about female athletes was significantly larger than the articles about male athletes ($F(1,6) = 5.41, p=.001$).

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CHAPTER 1

Introduction

Purpose

The purpose of this research was to collect empirical data on the Globe and Mail sports section coverage of the Modern Winter Olympic Games from 1924 to 1992. The main focus of the research was a comparison of female and male athlete sports coverage. These data were compared to Winter Olympic participation rates to ascertain if the Globe and Mail Winter Olympic Games coverage is an accurate reflection of what actually transpired during the Olympic competition. The prime aim of the paper was to determine if media underrepresentation of female athletes is a function of media bias or a result of inequities in sport participation.

Significance of the Study

Interdependency

The media and sport are interdependent (McGregor, 1989). The relationship between the media and sport may be described as the sports-media complex (Kidd, 1987), or the sport/media nexus (McKay and Rowe, 1987). Consensus is that media and sport are indispensable to one another; that is, sport sells media and media sells sport (Valgeirson & Snyder, 1986).

Social Agents

From a social perspective, sport and the media are two primary agents involved in the socialization process (Eitzen & Sage, 1989):

Sport has always been one of the primary means of civilizing the human animal, of inculcating the character traits a society desires....The lessons learned on the playing field are among the most basic: The setting of goals and joining others to achieve them; understanding of and respect for rules; the persistence to hone ability into skill, prowess into perfection (Time, June, 26, 1978, cited in Eitzen, 1989, p. 108)

Sport participation may initiate "appropriate" habits and attitudes that may transfer into school, work, and life, but on the other hand may foster selfishness, and self-importance. Orlick and Botterill (1976) noted that sport may mean group inclusion or exclusion, acceptance or rejection, development of concern for others or development of lack of concern for others, and increase in self-worth or decrease in self-worth.

Similarly, the media wields great influence on society. The media,

...may be the masters of consciousness....The import of the media lies in their production of ideas, stereotypes, and myths that are consumed and shared by the citizenry.... Newspapers, radio, television, especially when subject to the discipline of the market place, must reflect moods and attitudes evident in the country....Whatever social reality the media have reflected, though, they have also moulded - whether this term be refined to mean reinforce, legitimate, glorify, enshrine or alter. Over time, the media do exercise a definite power upon the

ways, the rituals, the assumptions, the concerns of the public, which together with much else constitute the social reality (Rutherford, 1978, p.124-125).

The media enhances the socialization process and wields its power via two functions; manifest function (or primary and secondary) and latent function (or compounding). Through the manifest function the media is able to inform and entertain the reader. The latent function is more subtle but perhaps more encompassing. The latent function encourages social integration and social change by the values, ideas, and attitudes that the media presents or does not present in the media (Eitzen & Sage, 1989, p. 226).

Social Insight

Assuming that communication influences and is affected by the social milieu, examining media can provide insight about people at a certain point in time. One is able to gain historical insight, observe trends, sight cultural differences, espy biases, and remark on the rise or fall of fads.

Utilizing content analysis as a research tool allows inspection of past records. Another benefit of content analysis is that it is an inconspicuous measure because an investigator can observe without being observed. Lastly, replication of a study is possible as newspapers are readily available (Wiseman & Aron, 1970).

Mutual Benefits

Smith and Blackman (1978) argue that the relation between sport and mass media is motivated primarily by a mutual desire for financial benefit: sport gains from free publicity in the newspapers and broadcasting rights revenue paid by radio and television networks. The mass media profit from the bond because they sell the "valuable" sports information the public wants. In fact, Ruth Clarke's 1984 survey (cited in Stevens, 1987), found that two thirds of American newspaper readers want more space devoted to sport. Thus, both media and sports mutually benefit from their union.

Newspapers and prevalence of sport and Media

The connection between the newspapers and sports has become well established,

...so much so that in many of North America's most popular newspapers, sports coverage constitutes almost 50% of the space devoted to local, national, and international stories, and currently the sports pages have about five times as many readers as any other section of the newspaper (Eitzen & Sage, 1989, p.226).

Furthermore, in 1984 sports accounted for approximately 15 to 20 percent of the foreign news in newspapers in both industrialized and developing nations (Stevens, 1987).

Indeed sport and media are important components of our lives. A 1986 survey of Canadians aged 15 years and older revealed that the average Canadian spends 14.7%

(or 65% of his/her total leisure time) of their day watching or reading media and/or participating in sport (The Canadian World Almanac, 1991, p. 289).

The preceding paragraphs demonstrate the power, the prevalence, and the interdependency of sports and the media. Both sport and the media are powerful institutions in our society, and when combined they wield great influence over public perceptions and attitudes (McGregor, 1989). As these two indices are inherently involved in shaping people's values and beliefs, the media coverage of sport warrants scientific investigation. Researchers in the United States and Europe have examined print media sports coverage; however, limited research has been completed on Canadian coverage. In fact there is a need for more quantitative data to support or refute studies and assumptions regarding the portrayal of sport and gender in the media. This research incorporated the unique feature of comparing participation rates to sport media reports. Thus more meaningful conclusions may be drawn with respect to gender representation in the newspaper. Because sport is a microcosm of society, more scientific research on Canadian print media coverage of sport is needed to gain better insight into what the public is reading and perceiving about sport and society in general.

Limitations

1. The content analysis relies on the reliability of one individual classifying the articles and pictures.

Delimitations

1. The study was delimited to only the Globe and Mail sports coverage during the Winter Olympic Games time frame; 1924 to 1992.
2. Criteria used to classify the articles were: gender, day of competition, location of article, performance of the subject in the article, source of the article, the sport in question, the affiliation of the subject in the article, and the size of the article.
3. Criteria used to classify the pictorials were: gender, location of picture, type of pictorial, subject of the pictorial, type/theme of picture, affiliation, and the size of the pictorial.

Definitions

Affiliation - Articles and pictorials were categorized according to the country mentioned in the article or depicted in the picture. For example, if the article stated Gaetan Boucher of Canada.... The affiliation of the article was deemed Canadian.

Agate - The statistical section of the newspaper sports section. For example scoring races and league standings.

Content Analysis - Content analysis is a form of

nonparticipant observational research which may be described as the systematic, quantitative description of the composition of the object in question (Gay, 1987).

Latent (Compounding) Function of Media - The latent functions of media is social integration and social change. Examples of the latent function are, frequency of topic, subject reported, and prominence of topic.

Location - The location where the article or picture appeared in the Globe and Mail; for example, front page or third page in the sports section.

Manifest (Primary and Secondary) Function of Media - The communication of information and the provision of entertainment to the reader. Examples of the manifest function are to inform, report, publicize, reflect, sensationalize, and highlight.

Not Applicable - On occasion newspaper text or pictorial may be very ambiguous or does not have information pertaining to the study; if this is so the article or picture is classified as not applicable.

Performance - Medal winning performance or non-medal winning performance.

Size - The area of an article or pictorial measured in square centimetres.

Social Agents - Any institution, service, and cultural activity that may aid in socializing individuals into

the society in which they live; for example, sport, media, religion, and schools.

Source - The author of an article; for example, male, female, Canadian Press (cp), and not available (na).

Sport - The sport reported in the article or depicted in the photograph.

Subject - Pertains only to pictorials and denotes whether the subject of the article was an athlete or a non-athlete.

Type/Theme - With respect to articles this refers to whether the text reported an athletic endeavour, a human interest story, or a scandal. With respect to pictorials type/theme refers to if the photo was athletic active (competition footage), athletic passive (athletic uniform and environment non-competition footage) or celebratory (showing the athlete(s) in a victorious pose).

CHAPTER 2

Review of Related Literature

Several researchers have conducted content analyses of sport journalism in newspapers and magazines. For example, Lever and Wheeler (1984) examined the Chicago Tribune sports pages for the years, 1900, 1925, 1950, and 1975. Their goal was to provide an empirical base for assessing the changing nature of sport as a part of mass culture. Lever and Wheeler concluded that the increasing size of the sports section mirrored the growth of sport in general. Coverage of the two major American spectator sports dominated the sports pages. Basketball, ice hockey, and tennis coverage increased while horse racing and boxing coverage decreased. Emphasis of sport coverage progressively shifted from individual to team, amateur to professional, and local/regional to national sport. Finally, women's sport coverage grew from 1.2% in 1900 to 4.0% in 1925, but only grew 0.1% between 1925 and 1975.

Print Media and Gender Issues

To date, most content analyses of the print media specific to sport include a comparison of the coverage afforded male and female athletes. Crossman, Hyslop and Guthrie (1994) analyzed the content of the sports section of the Globe and Mail, focusing on the coverage

granted to female, male, professional, and amateur sport. Upon reviewing 56 Globe and Mail sport sections between July 1, 1988, and June 30, 1989, the researchers concluded that males significantly and consistently received greater coverage than females in print, pictorial and editorial sports section space. Specifically, male to female ratios were 19:1 for editorials, 18:1 for professional print space, and 15:1 for sports pictorials.

A survey conducted for the Canadian Association for the Advancement of Women and Sport and Physical Activity (CAAWS) indicated that sports sections of 20 Canadian daily newspapers devote close to 95% of sport space to men's sports. The survey examined daily newspapers across Canada on Monday, September 23, 1991, a day when sport coverage would not be skewed due to one single, major sporting event. The percentage of column inches devoted to male athletes was 94.6%; women received 2.8% while 2.3% of the space was devoted to mixed gender articles ("Women's Sports Get", 1991). Eight dailies had no individual articles on women's sports and three dailies including the Globe and Mail did not mention a single female athlete. Furthermore, the inadequate coverage of women's sport was not due to a lack of events to cover as there were eight international competitions that involved high

performance Canadian women athletes.

Mawson and Ball (1990) examined the media coverage of the 1989 National Association of Intercollegiate Athletes (NAIA) Women's and Men's Basketball Championships. The researchers analyzed three Kansas City area newspapers by measuring the column inches of newspaper sports sections for eleven days. The average daily column inches of newspaper coverage for women's NAIA teams (13.7 column inches) was significantly less ($p=.002$) than for men's NAIA teams (36.7 column inches) (Mawson & Ball, 1990).

Similarly, Bryant (1980) investigated the sports coverage of the Denver Post. He found that female sport was underrepresented in text and pictorials, receiving 6.1% and 9.3% of the sport section coverage respectively. Furthermore, only 14.9% of the authors were female, and regardless of the journalist's gender, no articles about women's sport appeared on the front page of the sport section (Bryant, 1980).

Biases with respect to the location where a story appears has also been documented. Such bias was evident when Grete Waitz broke the world record in a women's 10,000 metre race held in New York City. The New York Times carried the story on page nine of the sports section; the preceding eight pages covered only male sports of which none rivalled Waitz's feat (Boutilier &

San Giovanni, 1983,p. 199).

Gelinas and Theberge (1986) reviewed the Toronto Star and Montreal's La Presse for a three month period (May to July 1986), focusing on editorials, news, and feature articles pertaining to physical activity and recreation. Data was compared to participation rates collected in the 1981 Canada Fitness Survey. Their primary finding was that recreational sport took a "backseat" to male professional sport.

Theberge (1991) investigated the print media coverage of women in all issues of four daily newspapers for a six month period. The monthly magazine, Chatelaine was also examined for a period of ten and a half years. She concluded that print media is not challenging stereotyped portrayals of women; and may be perpetuating women stereotypes with respect to physical activity. This finding was especially true for the newspapers, which are considered to be a conservative influence in the contemporary fitness movement (Theberge, 1991).

Several content analyses have been done on the popular magazine Sports Illustrated. Reid and Soley (1979) reviewed Sports Illustrated during 6 four year intervals (72 issues in total between 1956 and 1976). The researchers concluded that the coverage of women's sport by Sports Illustrated had not increased from 1956

to 1976 though female sport participation has increased during that time span (Reid & Soley, 1979).

Kane (1988 and 1989) reviewed relevant research on women in print media since the inception of Title IX (In 1972, Title IX made it illegal to discriminate on the basis of sex in any federally funded institution in the United States). She argued that female athletes today remain heavily restricted and their sport participation is directly related to gender role conformity (Kane, 1989). She points out that there was an increase in women's athletic coverage in Sports Illustrated after Title IX, but cautioned that women are still underrepresented while the portrayal of women in "sex appropriate" sports (such as tennis, figure skating and swimming) is on the rise (Kane, 1988).

The content of Sports Illustrated's feature articles between 1954 and 1987 were analyzed. Of the 3,723 feature articles surveyed, 90.8% were about the lives and accomplishments of men, and 91.8% of the articles were written by males (Lumpkin & Williams, 1991). In addition, the average length of articles pertaining to males were longer than articles written about females. The researchers surmised that Sports Illustrated reinforces traditional attitudes toward women in sport by limiting the number and length of articles on female athletes and essentially depicting

women in "sex appropriate sports" (Lumpkin & Williams, 1991). Furthermore, sports reporting often overemphasizes femininity at the expense of describing athletic ability. This is evident in a Sports Illustrated article on figure skating, which read:

Other than that, it was a slow day for eroding the moral fibre of the Western World. But then, that's the problem with 20-year-old Katarina Witt of East Germany. She's so fresh-faced, so blue-eyed, so ruby-lipped, so 12 car-pileup gorgeous she makes a lousy enemy of capitalism. Forget Raisa Gorbachev; here's Katarina, 5'5" and 114 pounds worth of peace keeping missile (Lumpkin & Williams, 1991,p.28).

Content analysis of Sports Illustrated for Kids revealed both qualitative and quantitative differences in how female and male athletes were portrayed in photographs (Duncan & Sayaovong, 1990). The authors found discrepancy with respect to gender in the number of photographs, the types of sports (for example women depicted in "sex appropriate" sports), level of activity (women usually shown in a more passive role) and camera angle. These findings are of particular importance because gender bias messages are being sent to a younger population who no doubt are in search of role models.

Hilliard (1984) reviewed 115 magazine articles on the four leading male and eight female tennis players between June 1979 and September 1983. Articles were analyzed quantitatively (counting of articles) and

qualitatively (counting the frequency of "masculine" words and "feminine" words) in order to confirm or to refute research indicating that women's sports are disproportionately represented and trivialized in sport journalism. Articles on male only tournaments outnumbered articles on female only tournaments. There were 33 editorials on the four leading males and 27 editorials on the eight leading women and all the articles that covered major championships listed were written by men. When women tennis stars were described they were often judged by standards of feminine beauty while their athletic ability was again trivialized (Hilliard, 1984).

Compared to other sports-related publications, Young Athlete magazine covered female sport favourably. Rintala and Birrell (1984) reviewed the magazine between 1975 and 1982, and found that women were reported proportional to their sports participation rate. However girls were over-represented in aesthetic, "sex appropriate" sports and underrepresented in team sports, even those they dominated numerically. Similarly, Brocard (1992), upon reviewing eleven different magazines noted that sport women were often stereotyped as models of aesthetics, hygiene and feminine "morals," thus trivializing their athleticism.

The sports section production process at a medium

sized American newspaper was analyzed to determine if this newspaper's content was socially constructed and/or constrained by the work routines of its journalists (Theberge & Cronk 1986). The researchers discovered two reasons for poor coverage of women's sport. First, reporters were assigned certain sports and/or teams to cover which resulted in biased reporting and predictability. Or as Surface (1972) remarked, in some respects sports reporting has become "so partial and so predictable that, on many occasions, it resembles more the work of a master of ceremonies than that of a journalist" (Surface, 1972, p.49). Second, the structure of the sports section was virtually the same everyday. Specifically, the first page did not contain advertising and page two was a gate (the team statistics, standings and game results which are deemed vital to sports sections). Another occurrence that limited the scope of sports coverage was the reliance on outside sources, usually wire services, which tend to repeatedly cover the same sporting events, thereby placing the responsibility of objective journalism on the larger sport sources such as, the Associated Press instead of the smaller, local newspaper (Theberge & Cronk, 1986).

The gender of the staff of sports departments may also influence journalism (Anderson, 1983; Eberhard &

Myers, 1988; Theberge & Cronk, 1986). Eberhard and Myers (1988) found that 63% of American newspapers with circulations greater than 100,000 had a woman on the sports staff. Overall, less than 9% of the newspapers' sports journalists and 2% of American daily newspaper sports editors were female (Anderson, 1983). Moreover, 60% of the women sports writers said they had faced discrimination from male peers, but emphasized that discrimination is not as prevalent as in the past (Eberhard & Myers, 1988).

Print Media Outside North America

Disparities, in sport journalism are evident in countries outside North America as well. In Australia, research has pointed out that Australian media has a tremendous masculine bias and legitimizes militaristic nationalism (McKay & Rowe, 1987). Klein (1988) analyzed 3,000 sport reports and photographs from four national West German newspapers. She concluded that the press functioned, "...as a normalising agent in the discourse of sport, which, amongst other things, legitimises the marginal position of women in sport" (Klein, 1988, p.139).

Fasting and Tangen (1983) analyzed how women's sports were presented in a sample of the four largest newspapers in Norway. Of 1045 articles reviewed in 1980/1981, 748 (72%) articles applied to male sports,

105 (10%) pertained to female sport and 198 (18%) were related to both male and female sport (Fasting & Tangen 1983). The researchers concluded that media coverage is not indicative of recreational sport participation rates in Norway (female 40% and male 60%).

Furthermore, under-representation of women sport media may be due to the attitudes of the predominantly male editorial staffs toward female sport and may inhibit participation of minority groups in general (Fasting & Tangen, 1983).

A cross cultural comparison of the New York Times, the London Times, and the Morgunbladid (Iceland's "morning paper") with reference to number of articles, space allotted, news devoted to male, female, professional and amateur sport was conducted by Valgeirsson and Snyder (1986). All three papers commit similar space to sports coverage; New York Times (7%), Morgunbladid (8%) and the London Times (10%). The Morgunbladid allotted more space to female sport, amateur sport and recreational activity than did the New York Times and the London Times. In contrast, these papers devoted the vast majority of sport coverage to male professional sport. The authors concluded that the coverage of male professional sport mirrors relevant facets of the societies in question (Iceland tends to emphasize participation and fitness more so

than the United States and England which underscore competition and declaring a winner).

The Newspaper Coverage of the Olympic Games

The relation between the Olympics and the media has become more than symbiotic (Morrow, 1987).

The Olympic Movement has gained significantly from its long association with the mass media. The media's endless fascination with Olympic events and athletes has enormously aided Coubertin's successors and followers in recruiting more and more people, social strata, and communities to their activities. It has ensured "the widest possible audience" (Kidd, 1987, p. 1.5).

Perhaps the best testament to the preceding statements was the peculiar situation at the 1976 Montreal Olympics, where the reporters (7,886) outnumbered the athletes (6,934) (Griffiths, 1978).

Morrow (1987), conducted content analyses on six Canadian daily newspapers (the Halifax Herald, the Montreal Daily Star, the Toronto Daily Star, the Winnipeg Free Press, the Calgary Herald, and the Vancouver Sun), examining the coverage of the 1908, 1928, and 1948 Olympic Games. Frequency and prominence of Olympic print coverage increased steadily from 1908 to 1948. Reports were directly related to journalist's perceptions of success (primarily medal winnings), and concentrated on a distinct theme (1908 - Tom Longboat and marathon mania, 1928 - Canadian success, and 1948 - Canadian failure). The Olympic coverage reflected

Canadian cultural links as anti-American sentiment was customary in 1908 and 1928 (Canada still had strong ties with the United Kingdom), but in 1948, anti-American sentiment was not prevalent in sports coverage because Canada's ties with Great Britain were loosening while American ties were tightening (Morrow, 1987). Overall, press coverage was homogenous as each Canadian paper covered the Olympic Games similarly; however, some regionalism was evident in 1948 because western and maritime provinces voiced displeasure with central Canada's dominance in the Olympic team selection process.

Toohey (1986) examined the coverage of the 1984, Los Angeles Olympic Games in five of California's largest circulating newspapers (the Los Angeles Times, the Press Telegram, the San Diego Examiner, the Sacramento Bee, and the San Francisco Chronicle/Examiner). Of the total space devoted to the Olympics; sport events coverage accounted for 57.5% and non-sport events 42.5%. The emphasis of the sport coverage was on track and field. Specifically, track and field accounted for 27.7% of the space devoted to Olympic sport coverage, swimming 7.9%, gymnastics 6.9%, boxing 6.8% and basketball 6.4% (24 less popular sports accounted for the remaining 44.3% of Olympic sport coverage). In addition, articles reporting many sports

simultaneously accounted for 10.4% of the space devoted to Olympic sport coverage. Interestingly, the word gold/golden appeared in 52% of the headlines. Toohey concluded that the California papers gave the Olympic Games very positive exposure.

Similarly, Pfister (1987) analyzed West Germany's Frankfurter Zeitung/Frankfurter Allgemeine Zeitung (a liberal newspaper available throughout Germany). Reports of female Olympic competitors were compared to female Olympic Games participation between 1952-1980 in the German newspaper. In general, she found an increase in female sport print coverage over time, which corresponded to the growing number of female participants. Specifically, the percentage of Olympic sports reports about women rose from 14.6% in 1936 to 29.3% in 1980, while women's participation in the Olympics rose from 8.1% in 1936 to 21.6% in 1980, indicating that gender discrimination was diminishing (Pfister, 1987). However, Pfister remarked that gender bias in the press had not diminished as women's sport was often considered absurd or reported in a sexual context. The following excerpts clearly reinforce her statement:

As much as we welcome this success, we still believe that such competitions as the Olympic Games are no place for women. It became all too clear that women should not run such long distances (800 metres). After completion of this race, Frau Radke was not the only one to

fall onto the grass; almost all other competitors collapsed, exhausted. It was not a pretty sight (Franfurter Zeitung, August 3, 1928, p.3, cited in Pfister, 1987, p. 11.28)

and 44 years later the same newspaper's sports pages read:

In Munich, only one person did not pass the sex-test. All the others passed the examination of their femininity. A test which was no longer necessary. For the men, evaluating, lusty and admiring, had already undertaken the most suitable of all tests. All of the women were worth a flirt. (Frankfurter Allgemeine Zeitung, Sept. 2, 1972, cited in Pfister, 1987, p. 11.29)

Likewise, Williams (1986) examined media attention given to women athletes at the Olympic Games. Williams concluded that, like the rest of the sports world, gender inequalities are reflected and perpetuated by the Olympic Games and its media coverage.

Olympic journalism is not solely concerned with the exploits of athletes. Toohey (1986) found that 43.5% of Olympic press coverage pertained to non-sport events. Indeed, political questions such as boycotts receive substantial press in the sport pages.

Coulter (1986) examined press coverage of the 1976, 1980 and 1984 Olympic boycotts of a corporate owned national newspaper, the Globe and Mail, and an independently owned local newspaper, the Kingston Whig Standard. Coulter hypothesized that the Globe and Mail failed to give readers more than one side of the issues surrounding Olympic boycotts and that an independently

owned paper such as the Kingston Whig Standard may have presented the boycotts more objectively. The results of the survey tended to support Coulter's hypothesis. Biases reflecting the Globe and Mail's corporate structure seemed to be portrayed in boycott coverage. That is, the Globe and Mail was somewhat hypocritical by condoning the 1980 Olympic boycott by Canada and other "westernized" nations while condemning the 1976 African nations' boycott and 1984 former Eastern Block nations' boycott. On the other hand, the Whig Standard tended to be more objective in editorials about the boycott, generally being careful to present both sides of the story, sometimes questioning the Canadian government's boycott policy (Coulter, 1986). Coulter concluded that well-rounded, objective journalism tends to disappear when a corporate newspaper attempts to appease its overriding national-business concerns.

Summary

Results from both quantitative and qualitative research indicate that there is profound discrepancy between male and female sport coverage. Common themes evident in sport print media literature include; women are underrepresented in sporting news (Bryant, 1980; Crossman, et al, 1994; Duncan & Sayaovong, 1990; Gelinas & Theberge; 1986; Hilliard, 1984; Kane, 1989; Lumpkin & Williams, 1991; Mawson & Ball, 1990; Theberge,

1991); female athletes, when reported, are predominately displayed in "sex appropriate sports", such as figure skating, gymnastics and tennis (Brocard, 1992; Bryant, 1980; Duncan & Sayaovong, 1990; Hilliard, 1984; Kane, 1989; Lumpkin & Williams, 1991; Reid & Soley, 1979; Rintala & Birrell, 1984; Rintala & Kane 1991; Theberge, 1991); women's sport accomplishments tend to be trivialized (Boutilier & San Giovanni, 1983; Buysse, 1991); female sport coverage tends to be located in the latter pages of the sports section (Boutilier & San Giovanni, 1983; Bryant, 1980); and newspaper sports writing is primarily a male domain (Anderson, 1983; Boutilier & San Giovanni, 1983; Bryant, 1980; Eberhard & Myers, 1988; Theberge, 1989; Theberge & Cronk, 1986).

Content analyses of the print media from "westernized" countries outside North America exhibit similar patterns as North American print media.

Print media coverage of the Olympic Games has increased considerably over time (Kidd, 1987; Morrow, 1987); however, sports events are not necessarily the exclusive emphasis of Olympic Games sport journalism (Coulter, 1986; Toohey, 1986). The newspaper coverage of the Olympic Games reflect biases that are occurring in the press coverage of the larger sports world (Pfister, 1987; Williams, 1986).

Currently, there is a dearth of research pertaining to Canadian print media sports coverage, particularly Winter Olympic Games newspaper coverage. Investigation of newspaper coverage of the Winter Olympics is potentially useful as the social concerns of equality, sport participation, and media representation of these issues can be readily examined.

CHAPTER 3

Methods

Content Analysis

The conscious and unconscious beliefs, attitudes, values and behaviour patterns of individuals groups and organizations may be disclosed in the media. Content analysis permits the nonparticipant to observe the behaviour of people indirectly via the investigation of verbal symbols (written works) and non verbal symbols (art and architecture) (Wiseman & Aron, 1970).

Conducting a content analysis lends itself quite well to studying newspapers. However there are limitations associated with content analysis. Sometimes data is regarded as a cause to social phenomena rather than a reflection of social phenomena (Wiseman & Aron, 1970). Only accounts of what was written or recorded are available. Therefore, all occurrences may not have been recorded and the occurrences that were registered may not be considered important today. Periodicity, a confounding variable, can arbitrarily influence content analysis data. For example, during Olympic years there is an increase in athletics, luge and fencing coverage which is an aberration from normal coverage patterns. Concentrating on a single event such as the Winter Olympics, allows the researcher to compensate for periodicity. Finally,

consideration of the fact that media often mirrors cultural ideas and not always the actual activities that transpired is warranted (Wiseman & Aron, 1970).

A common finding in content analysis is that female athletes are underrepresented in print media when compared to comparison to male athletes. But it is difficult to ascertain if women are truly underrepresented because the media are only reporting what is transpiring in the sports world. For example, women may be underrepresented in the media because less women participate in sport. Focusing on the Winter Olympics is advantageous because of the availability of data with respect to the number and gender of Games participants. Thus, the content of the sports pages can be compared directly to actual sport participation to determine if the reporting is an accurate reflection of what transpired at the Winter Olympic Games.

Procedure

The collection of data was multi-phasic. Phase one included acquiring data on Winter Olympic participation with respect to gender of the participants.

Phase two involved a content analysis of the Globe and Mail sports section and front page coverage of the sixteen Winter Olympics held between 1924 and 1992 during the days of Olympic competition (see Table 1). The newspapers were surveyed by utilizing the Dukane

MDP-manual direct projection microfilm reader (actual copies were surveyed for 1992 content analysis). Text (feature article and editorials, excluding agate, "sports shorts or quips", and "where are they now" articles) were examined according to gender, affiliation, source, location, day of competition, sport, performance of subject, type and size of the article (see Table 2). Pictorials (photographs, diagrams and cartoons) were investigated as per gender, affiliation, subject, location, day of competition, sport, type and size (see Table 3). Articles in individual newspapers were categorized as follows: day of competition, total pages of the newspaper, number of sport pages, Olympic related articles, articles not related to the Olympics, Olympic related pictorials and pictorials not related to the Olympics. The MDP micro-film reader's projection was the actual size of the newspaper when it was first printed (see Table 4). This was achieved by setting the viewing area of the reader to the specifications listed in Table 4.

Phase three involved statistically analyzing the data collected in phase two. Frequency counts and descriptives were used to tabulate newspaper data. Lines of best fit were used to sight trends in newspaper coverage of the Olympics over time.

Table 1

Date and Location of the Winter Olympics Games

Year	Location	Date of Competition
1924	Chamonix, France	Jan. 25 - Feb. 4
1928	St. Moritz, Switzerland	Feb. 11 - Feb. 19
1932	Lake Placid, United States	Feb. 4 - Feb. 15
1936	Garmisch-Partenkichen, Germany	Feb. 6 - Feb. 16
1940	cancelled because of World War II	
1944	cancelled because of World War II	
1948	St. Moritz, Switzerland	Jan. 30 - Feb. 8
1952	Oslo, Norway	Feb. 14 - Feb. 25
1956	Cortina d'Ampezzo, Italy	Jan. 26 - Feb. 5
1960	Squaw Valley, United States	Feb. 18 - Feb. 28
1964	Innsbruck, Austria	Jan. 29 - Feb. 9
1968	Grenoble, France	Feb. 6 - Feb. 18
1972	Sapporo, Japan	Feb. 3 - Feb. 13
1976	Innsbruck, Austria	Feb. 4 - Feb. 15
1980	Lake Placid, United States	Feb. 14 - Feb. 23
1984	Sarejevo, Yugoslavia	Feb. 7 - Feb. 19
1988	Calgary, Canada	Feb. 13 - Feb. 28
1992	Albertville, France	Feb. 8 - Feb. 23

Note. Adapted from The Canadian World Almanac 1991 (p. 609) by J. Fillion, 1990, Toronto: Global Press.

A comparison between the percentage of male and female athletes to the percentage of male and female competitors was completed to ascertain whether a relation existed between actual Olympic print media content and actual participation rates.

Article Classification

The occurrence of key words in the text was used to determine the subject of an article. For example, if "hockey" frequently occurred in the text, while other names of sports did not occur, the theme of the article was considered hockey.

When articles pertained to more than one sport, gender, affiliation etc., the article was categorized as having multiple themes or subjects. If the gender, and/or affiliation of a pictorial did not accompany the picture the corresponding text was utilized to determine the nature of the photograph.

Reliability

To allow readers to investigate the classification of articles, all raw data is presented in a series of appendices and will be stored on computer disc for five years.

Table 2**The Categories Used to Analyze Globe and Mail Text**

Categories	Description of Categories & Particulars
Gender	male, female, or both (if the article discusses both male and female athletes it will be designated "both")
Affiliation	Canada, United States,
Source	male writer, female writer, news agency, or not available
Location	front page, page 1 sports section, page 2 sports section, etc.
Day of	
Competition	day 1, day 2, etc.
Sport	ice hockey, figure skating, etc.
Performance	medal performance, or non-medal performance
Type	athletic, human interest, scandal
Size	area of text in square centimetres

Table 3

The Categories Used to Analyze Globe and MailPictorials

Categories	Description of Categories & Particulars
Gender	male, female, both
Affiliation	Canada, United States, Multiple Countries (three or more countries simultaneously)
Subject	athlete, non-athlete
Location	front page, page 1 sports section, etc.
Day of Competition	day 1, day 2, etc.
Sport	alpine skiing, biathlon, etc.
Type	athletic-active (competition footage), athletic-passive (athletic uniform and environment non-competition footage) celebratory, non-athletic, or ambivalent (if the nature of the photograph is difficult to determine it will be designated "ambivalent")
Size	area of pictorial in square centimetres

Note. The corresponding text was used if the nature of the pictorial could not be readily determined.

Table 4

The Actual Dimensions of the Globe and Mail Newspaper
During Each Winter Olympic Games

Winter Olympic Year	Dimensions	
	Inches	Centimetres
1924	17.5 X 23.0	44.5 X 58.4
1928	17.0 X 23.0	43.2 X 58.4
1932	17.0 X 23.0	43.2 X 58.4
1936	12.0 X 22.75	30.5 X 57.8
1948	16.5 X 23.0	41.9 X 58.4
1952	16.5 X 23.0	41.9 X 58.4
1956	16.5 X 23.0	41.9 X 58.4
1960	16.5 X 23.5	41.9 X 59.7
1964	16.5 X 23.5	41.9 X 59.7
1968	16.5 X 23.5	41.9 X 59.7
1972	16.5 X 23.5	41.9 X 59.7
1976	16.5 X 23.5	41.9 X 59.7
1980	15.5 X 23.0	39.4 X 58.4
1984	13.5 X 22.75	34.3 X 57.8
1988	13.5 X 23.0	34.3 X 58.4
1992	13.5 X 23.0	34.3 X 58.4

CHAPTER 4

Results

During the data collection phase of this research over 23,000 items of data were collected. One hundred and seventy-seven newspapers, 1,184 articles, and 532 pictorials were examined. The results segment is organized into two sections: gender, and the Winter Olympics in general.

Gender

The number of articles solely pertaining to men (647), accounted for 54.6% of all articles, while 12.2% (144) of all Winter Olympic articles pertained solely to women. Twenty-four percent of all articles discussed both men and women simultaneously (see Table 5). Pictorials displayed an imbalance of coverage with respect to gender as 131 (24.8%) of pictorials depicted females and 346 (65.5%) of all pictorials depicted males (see Table 5).

An analysis of variance demonstrated that there was a significant difference in size of articles by group, $F(1,6) = 5.41$, $p > .001$. Contradictory to most current literature, the mean size of Globe and Mail articles about women athletes were larger than the mean size of articles about men athletes, 180.0 cm² to 172.2 cm² (see Figure 1a). The Student-Newman-Keuls procedure indicated that articles pertaining to both male and

female athletes were significantly larger than articles solely about males or females at the .05 level of significance. Figure 1b illustrates that the size of articles tend to increase each Winter Olympic Games for both males and females.

The mean size of pictures pertaining to females was 167.2 cm² and the mean size of pictorials pertaining to males was 150.7 cm² (see Figure 2a). There was a significant difference in size of pictorials according to gender $F(1,4) = 6.25, p > .001$. The mean size and number of pictorials for both men and women tended to increase each Winter Olympic Games. The relative size of articles about male athletes is increasing at a faster rate than articles about female athletes (see Figure 2b).

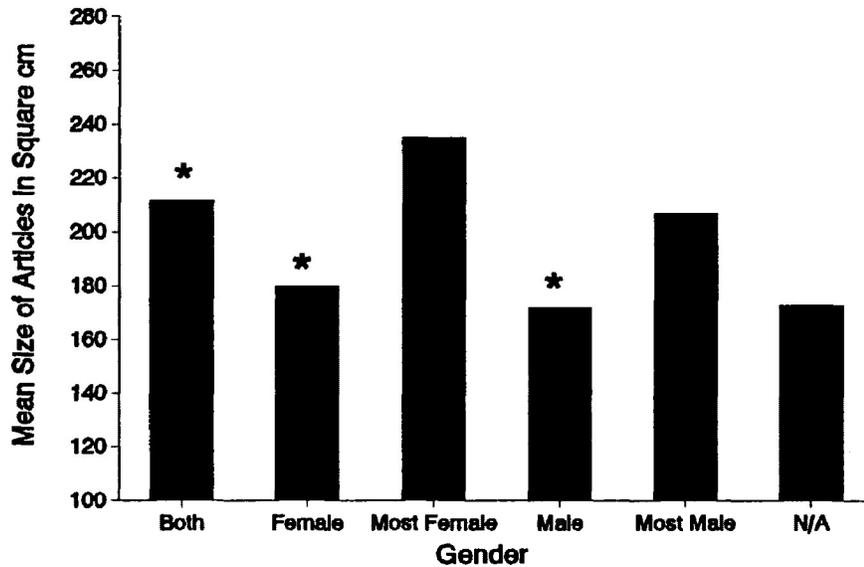


Figure 1a. The mean size (in cm²) of Winter Olympic articles appearing in the Globe and Mail by gender.

(*)Denotes pairs of groups are significantly different at $p > .05$.

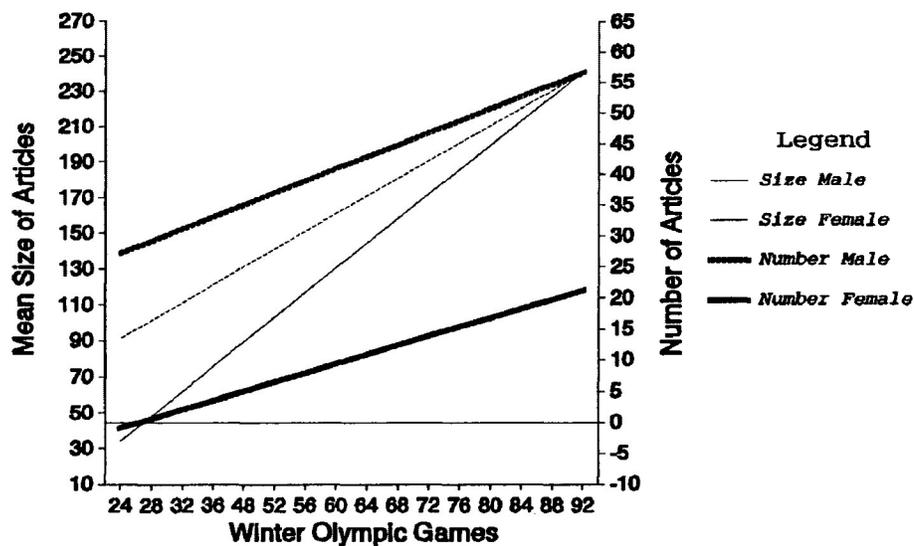


Figure 1b. The lines of best fit for the mean size and number of Winter Olympic articles appearing in the Globe and Mail by gender.

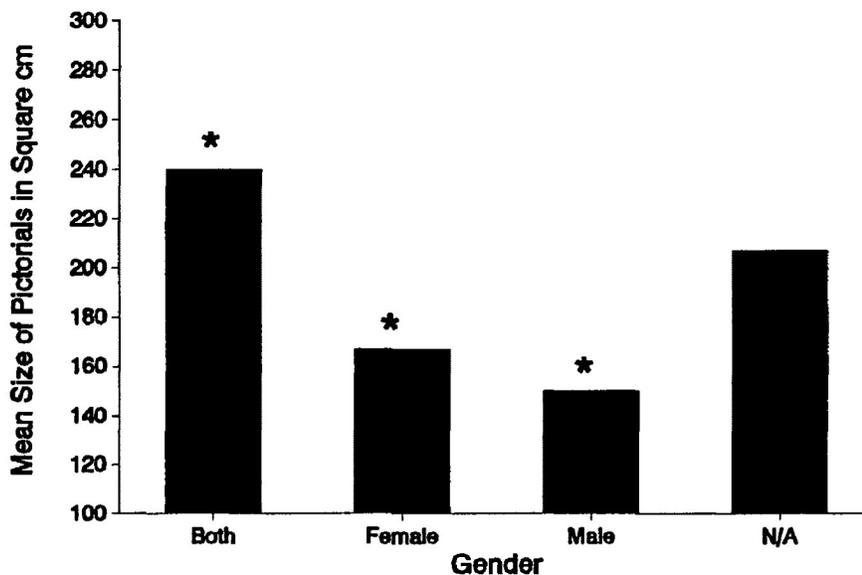


Figure 2a. The mean size (in cm²) of Winter Olympic pictorials appearing in the Globe and Mail by gender.

(*) Denotes pairs of groups are significantly different at $p > .05$.

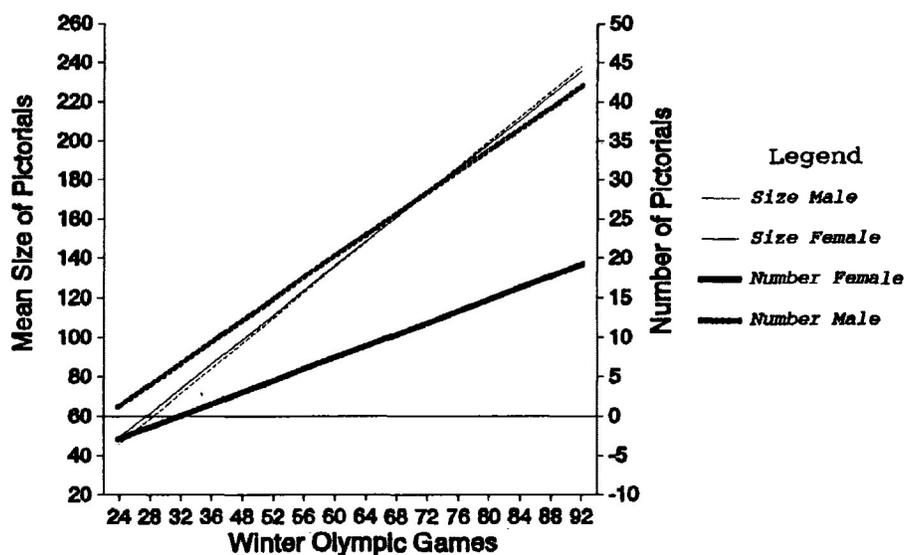


Figure 2b. The lines of best fit for the mean size and number of Winter Olympic pictorials appearing in the Globe and Mail by gender.

Table 5

Number of Winter Olympic Articles and Pictorials by Gender

Gender	Articles		Pictorials	
	Number	%	Number	%
Both	290	24.5	41	7.8
Female	144	12.2	131	24.8
Mostly Female	19	1.6	---	---
Male	647	54.6	346	65.5
Mostly Male	23	1.9	---	---
Not Applicable	61	5.2	10	1.9
Total	1184	100.0	528	100.0

Participation Rates

The prime role of sport media is to report events involving sport. To compare if the Winter Olympics were reported appropriately with respect to gender the ratio of male and female sport coverage was compared to the ratio of male and female Winter Olympic competitors. As the Globe and Mail is considered Canada's national newspaper the ratio of Canadian men and women participating in the Winter Olympic Games were compared to the ratio of sport coverage for Canadian men and women.

All Athletes

Male and female athletes accounted for 82% and 18%, respectively, of all Winter Olympic competitors. The percentage of Globe and Mail articles reporting men and women, were similar in percentage with respect to male and female participation rates (but did not statistically correlate): male and female subjects accounted for 80.4% and 19.6% of all Winter Olympic articles (see Figure 3).

During the first eight Winter Olympic Games (1924 to 1960), the Globe and Mail tended to cover male athletes in articles disproportionately more than the percentage of male competitors. In fact, during the 1928 and 1936 Winter Olympics female athletes did not receive any coverage (see Figure 4a). In five of the

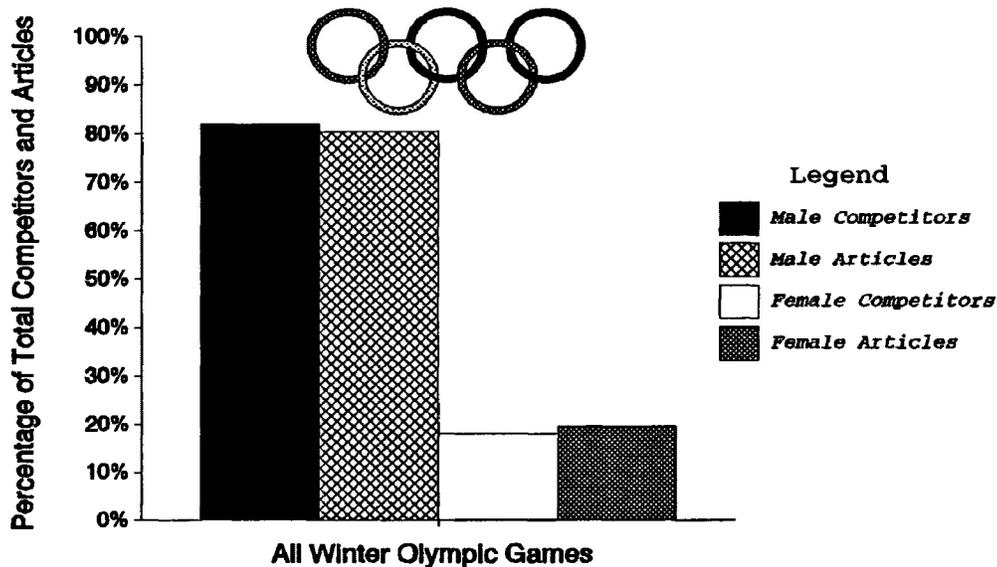


Figure 3. A comparison of the percentage of Winter Olympic competitors and articles by gender: 1924 to 1992.

eight most recent Winter Olympic Games women have received more coverage than men with respect to the ratio of male and female competitors (see Figure 4b). In 1992, 27% of the competitors were women and 31.4% of the articles were about women. Men accounted for 73% of the 1992 competitors and 68.6% of the Winter Olympic articles (see Figure 4b).

Women and men appeared in 27.5% and 72.5%, respectively, of all Winter Olympic pictorials. As mentioned earlier the participation rate was 18% female and 82% male (see Figure 5). During the 1928 and 1936 Winter Olympic Games women did not appear in pictorials, though female athletes constituted 4% and 11% of 1928 and 1936 competitors (see Figure 6a). From

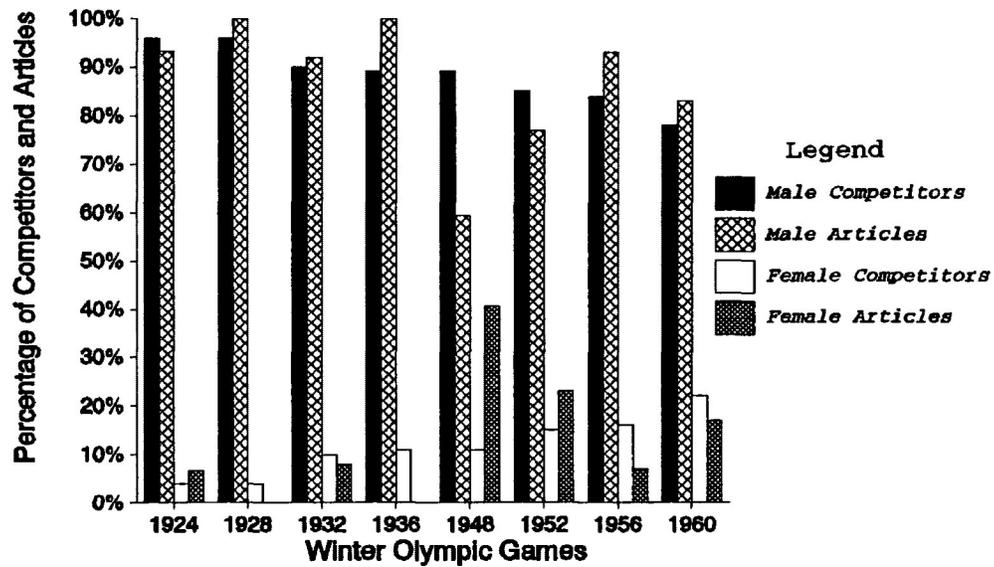


Figure 4a. A comparison of the percentage of Winter Olympic competitors and articles by gender: 1924 to 1960.

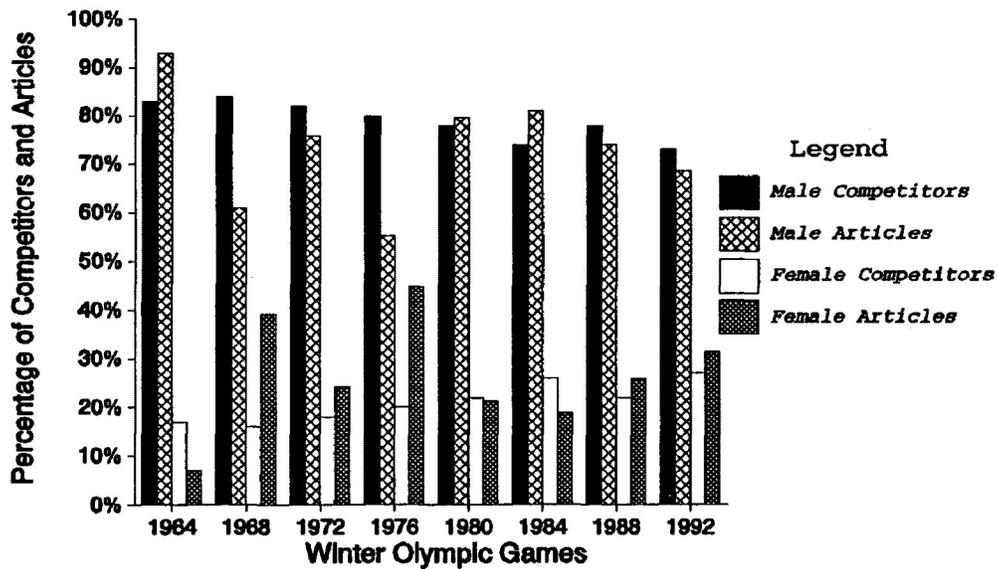


Figure 4b. A comparison of the percentage of Winter Olympic competitors and articles by gender: 1960 to 1992.

1964 to 1992, women athletes received a greater rate of pictorial coverage than the rate of female participation (see Figure 6b).

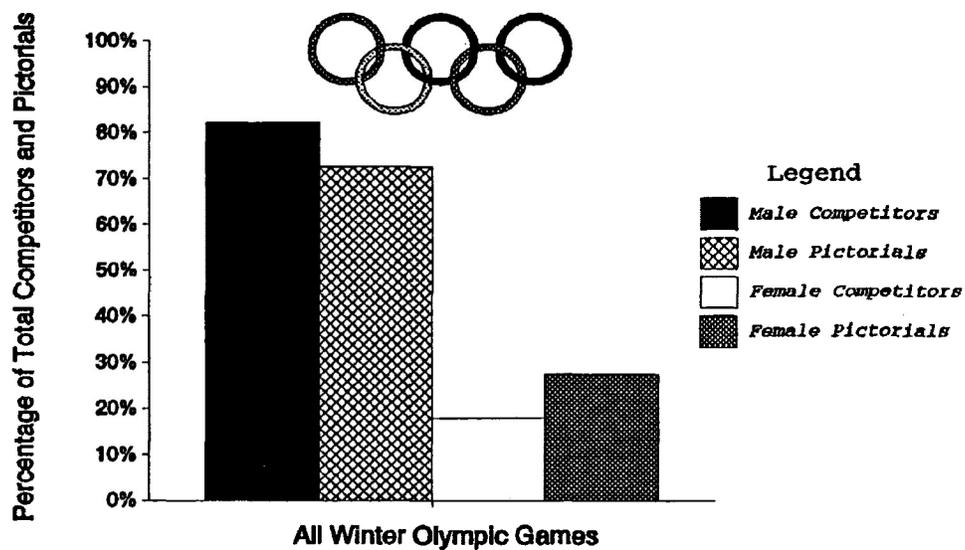


Figure 5. A comparison of the percentage of Winter Olympic competitors and pictorials by gender: 1924 to 1992.

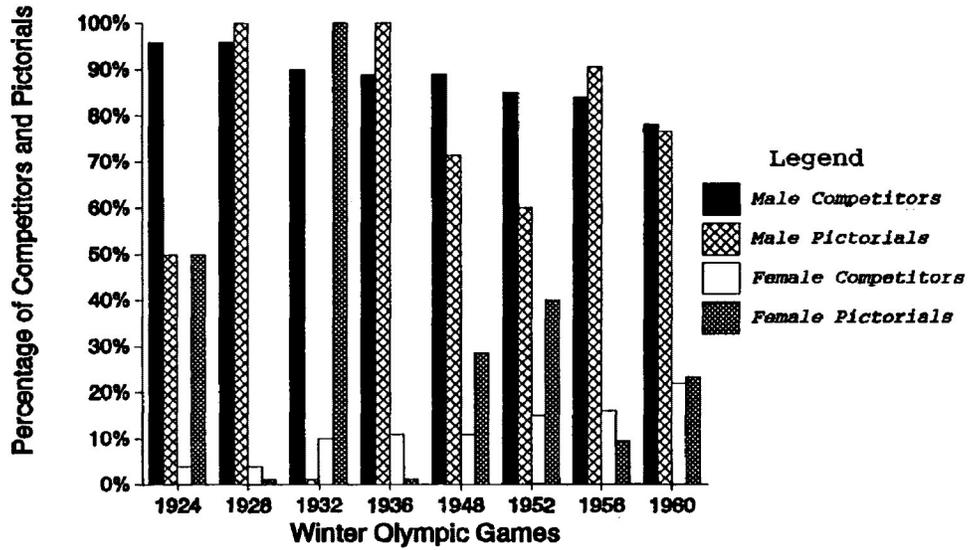


Figure 6a. A comparison of the percentage of Winter Olympic competitors and pictorials by gender: 1924 to 1960.

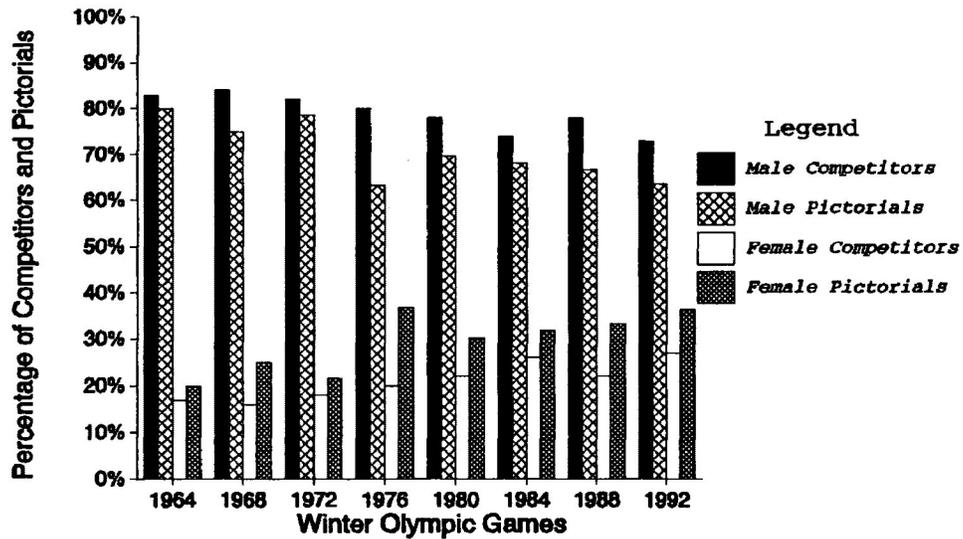


Figure 6b. A comparison of the percentage of Winter Olympic competitors and pictorials by gender: 1964 to 1992.

Canadian Athletes

Figure 7 compares the percentage of Winter Olympic articles about Canadians to the participation rate of Canadians. From 1924 to 1992, 72.6% of Canadian competitors were male and 27.4% of Canadian competitors were female. Seventy-eight and half percentage of the articles about Canadians reported males and 21.5% of the reported Canadian females. Figure 9 demonstrates that the percentage of articles about Canadian men and women is congruent with the percentage of Canadian male and female competitors.

From 1924 to 1960 the percentage of articles about Canadian males outnumbered the percentage of Canadian

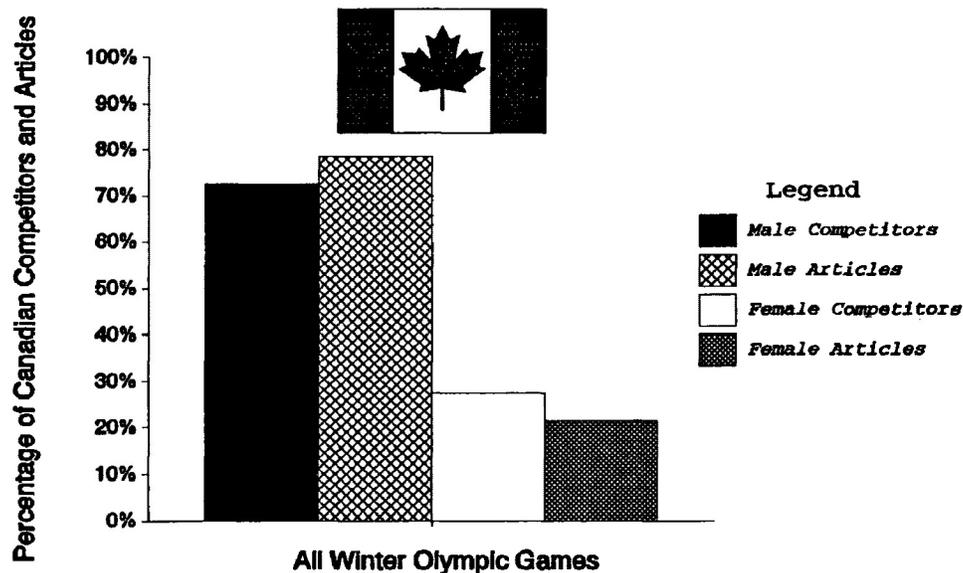


Figure 7. A comparison of the percentage of Winter Olympic competitors and articles about Canadians by gender: 1924 to 1992.

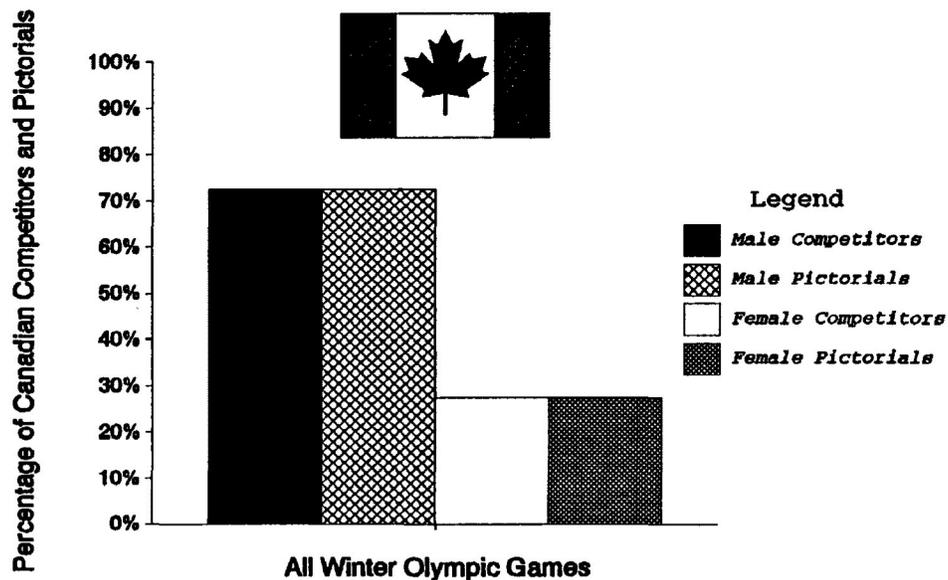


Figure 8. A comparison of the percentage of Canadian Winter Olympic competitors and pictorials about Canadians by gender: 1924 to 1992.

male competitors in six of eight Olympic Games (see Figure 8a). Conversely, from 1964 to 1992 the percentage of Canadian articles about females outnumbered the percentage of Canadian female competitors six of eight of the most recent Games (see Figure 8b). In 1928 and 1936, Canadian females were not depicted in any pictorials, though Canadian women represented 12% and 22% of all Canadian competitors (see Figure 10a). Figure 10b indicates that from 1964 to 1992 the percentage of pictorials about Canadian women outnumbered the percentage of Canadian women competitors five of eight Games.

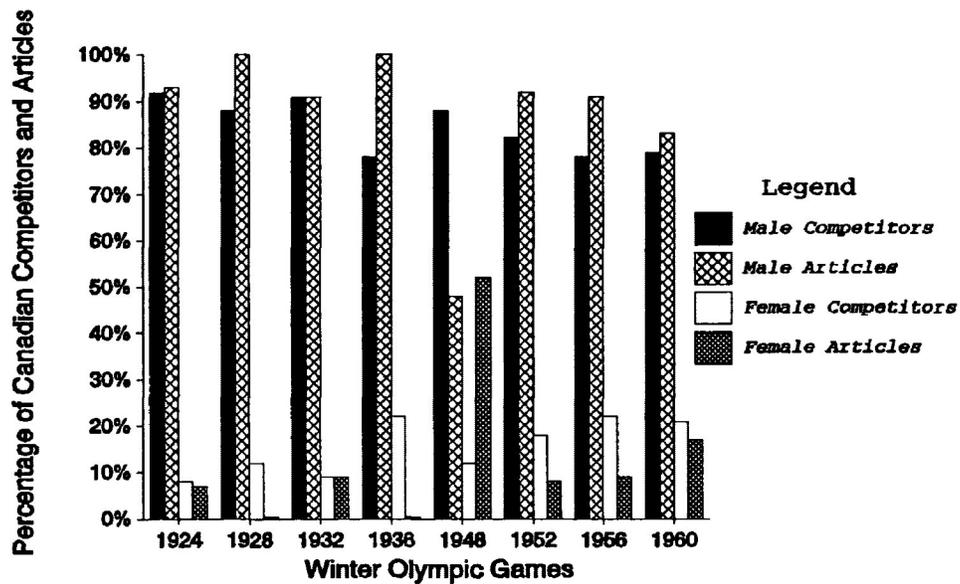


Figure 9a. A comparison of the percentage of Canadian Winter Olympic competitors and articles about Canadians by gender: 1924 to 1992.

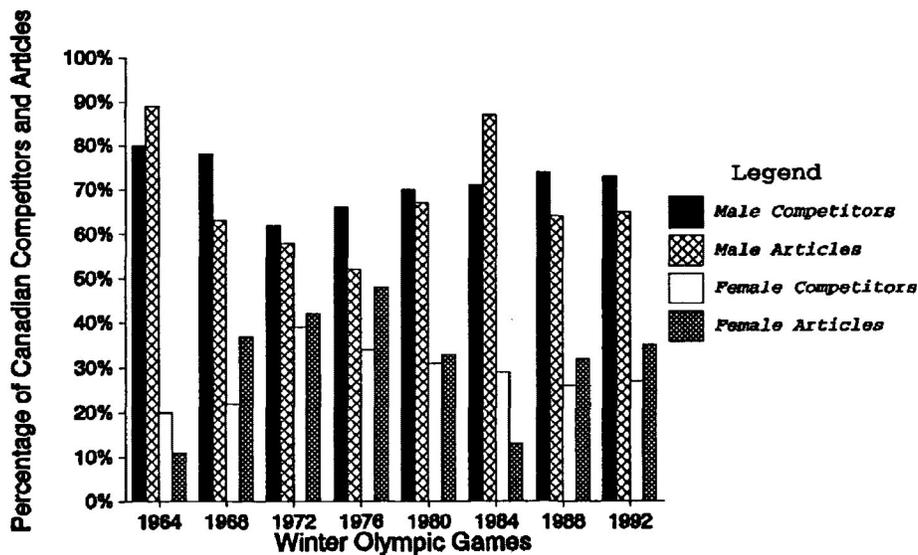


Figure 9b. A comparison between the percentage of Canadian men and women Winter Olympic competitors and the percentage of articles written about Canadian men and women: 1964 to 1992.

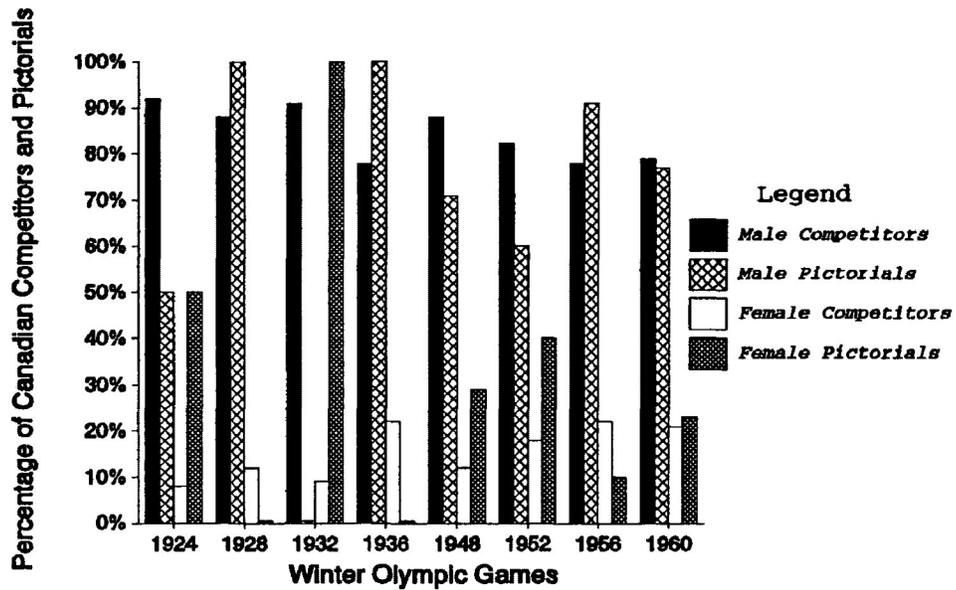


Figure 10a. A comparison of the percentage of Canadian Winter Olympic competitors and pictorials about Canadians by gender: 1924 to 1960.

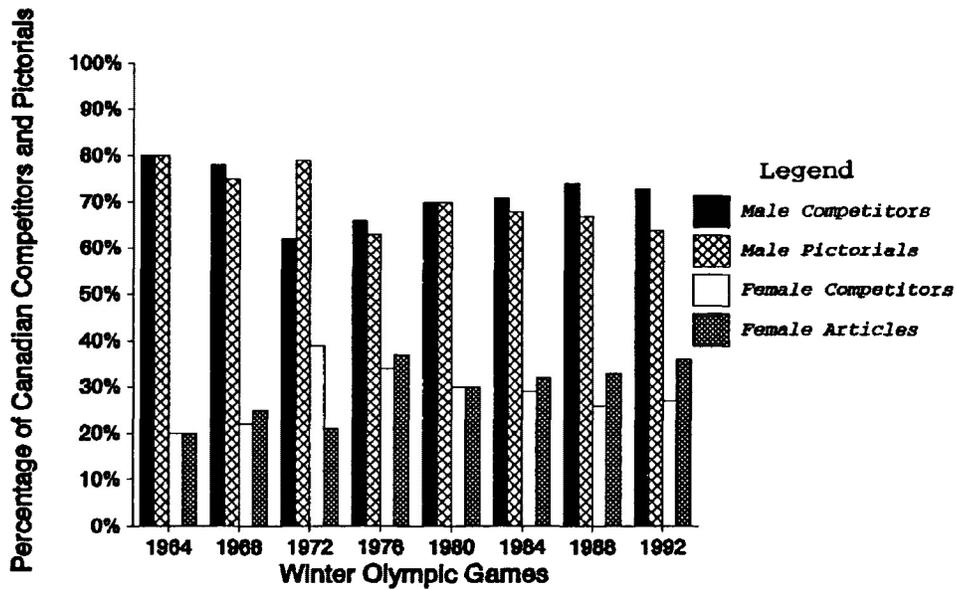


Figure 10b. A comparison of the percentage of Canadian Winter Olympic competitors and pictorials about Canadians by gender: 1964 to 1992.

Source

Table 6a indicates that 431 or 36.4% of Winter Olympic articles were written by male journalists and 75 or 6.3% of Winter Olympic articles were written by female journalists. The majority of Winter Olympic articles were written by one of the many news agencies such as the Canadian Press and the United Press. Male authors wrote 240 of their articles about men and 47 articles about women.

Table 6a**Frequency of Winter Olympic Article Source**

Source	Number	%
Associated Press	65	5.5
Canadian Press	263	22.2
Female Author	75	6.3
Male Author	431	36.4
Male Author and CP	18	1.5
Not Applicable	147	12.4
Reuters	13	1.1
Staff	22	1.9
UPI	70	5.9

Note. Percentages will not equal 100% as only sources that were represented more than 12 times (1% of all articles) are shown.

Female authors wrote 19 of their articles about male subjects and 18 articles about female subjects. Every source of Winter Olympic articles wrote more frequently about male subjects or subjects not distinguished by gender than female subjects (see Table 6b). Winter Olympic articles written by female journalists displayed the greatest mean size (248.7 cm²) (see Figure 3a). The mean size of articles by male journalists have steadily increased each Winter Olympic Games. Incredulously, the first Winter Olympic article written by a female occurred in 1976. (see Figure 3b).

Table 6b

Winter Olympic Article Source by Gender

Source	Number of Articles					
	Male	Mostly Male	Female	Mostly Female	Both	N/A
Associated Press	41	1	5	1	12	65
Canadian Press	157	4	28	7	63	263
Female Author	19	---	18	1	30	75
Male Author	240	7	47	8	101	431
Male Author & CP	10	3	3	1	1	18
Not Applicable	96	3	9	1	34	147
Reuters	6	---	2	---	1	13
Staff	11	2	3	---	8	22
UPI	36	2	9	---	16	70

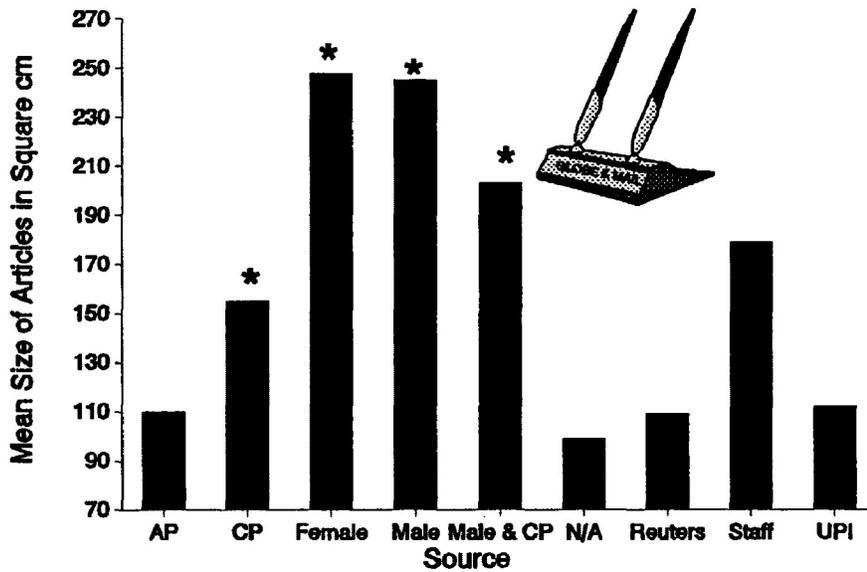


Figure 11a. The mean size (in cm²) of Winter Olympic articles appearing in the Globe and Mail by source.

(*) Denotes pairs of groups are significantly different at $p > .05$.

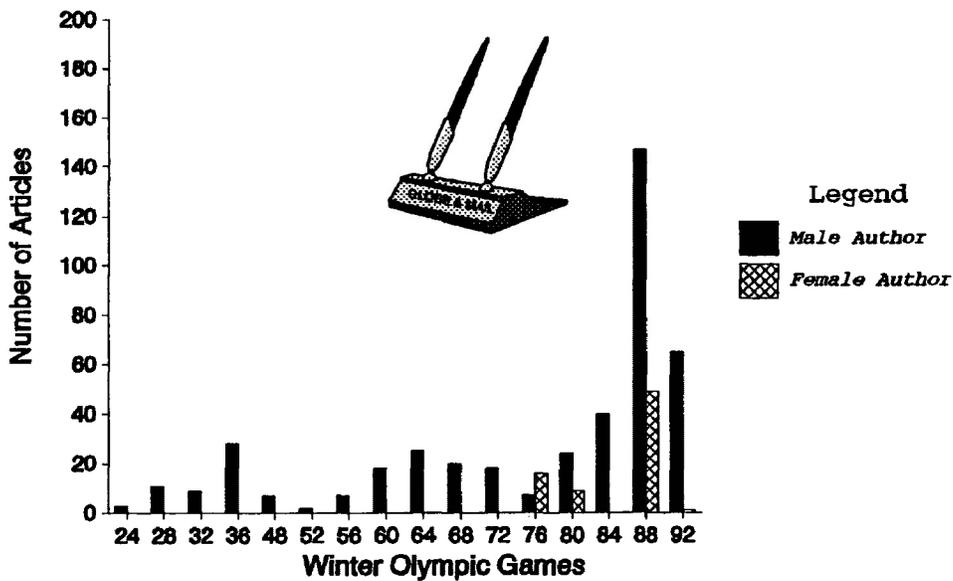


Figure 11b. The number of Winter Olympic articles appearing in the Globe and Mail by source by year.

Sport

Ice hockey was the most frequently covered sport, accounting for 29.5% of all articles. Of the eight sports which both males and females participate in (alpine skiing, biathalon, cross country, curling, figure skating, free style skiing, luge, and speed skating), 160 articles were written about males and 137 about females. Women were reported more than men in Winter Olympic articles about alpine skiing (55 to 51 articles) and figure skating (43 to 33 articles). Men were reported more frequently in the remaining sports excluding free style skiing in which both genders appeared in the same number of articles (see Table 7a).

Ice hockey was the most common sport depicted in pictorials accounting for 29.7% of all Winter Olympic pictorials. Men were reported more frequently than women in five of seven sports in which men and women both participate. The two sports where women received greater pictorial coverage than men are figure skating and luge (see Table 7b).

Subject

Not surprisingly, an athlete was the most common subject of a Winter Olympic pictorial. Male and female athletes appeared in 322 (60.5%) and 125 (23.5%) of all Winter Olympic pictorials. Seven male coaches and no female coaches appeared in a pictorial.

Table 7a

Sport Depicted in Winter Olympic Articles by Gender

Source	Number of Articles					
	Male	Mostly Male	Female	Mostly Female	Both	N/A
Alpine Skiing	51	2	55	8	11	11
Biathlon	6	---	2	---	---	---
Bobsled	36	---	---	---	---	---
Curling	5	---	2	---	5	1
Cross Country Ski	21	---	7	---	2	1
Figure Skating	33	---	43	4	57	---
Free Style Skiing	1	---	1	---	5	---
Hockey	346	---	---	---	1	2
Luge	7	---	5	---	2	---
Multiple Sports	36	12	2	4	145	12
Not Applicable	5	---	---	---	5	13
Opening Ceremonies	---	---	---	---	10	2
Ski Jumping	20	---	---	---	---	2
Speed Skating	36	4	22	22	10	---
Winter Olympics	11	---	---	---	13	14

Table 7b

Sport Depicted in Winter Olympic Pictorials by Gender

Subject	Number of Pictorials			
	Male	Female	Both	N/A
Alpine Skiing	52	49	4	---
Biathalon	7	4	---	---
Bobsled	23	---	---	---
Cross Country Skiing	9	4	---	---
Curling	---	3	---	---
Figure Skating	30	37	24	---
Free Style Skiing	3	1	---	---
Hockey	156	---	---	1
Luge	5	7	1	1
Not Applicable	5	1	2	2
Ski Jumping	16	---	---	---
Speed Skating	34	24	24	1
Winter Olympics	3	---	2	2

Type/Theme

Men were reported more often than women with respect to every type or theme of Winter Olympic article. Especially notable differences between male and female coverage was evident in articles involving athletic/commentary and scandal (see Table 9a).

Men and women appeared in athletic action poses 133 (25%) and 55 (10.3%) times respectively. Men appeared in athletic passive poses in 34 pictorials and women were shown in passive poses in 12 pictorials. A facial photograph (head shot) of males and females was shown in 24.6% and 5.8% of pictorials.

Performance

Winter Olympic articles about women who won medals accounted for 6.8% of all articles. Only 4.1% of articles reported women if they did not have a medal winning performance. Conversely, articles reporting men who won medals accounted for 191 (16.1%) of all articles surveyed while 323 (27.3%) reported men if they had a non-medal winning performance (see Table 10).

Location

The majority of articles pertaining to the Winter Olympics were located on the first and second page of the sports section (see Table 11a). Consequently, the first two sports page accounted for just over two

thirds of all Winter Olympic articles. Forty-eight or 4.1% of Winter Olympic related articles were printed on the front page of the newspaper.

More Winter Olympic articles about men appeared on the front page and the first pages of the sports section than women. In forty-one percent of the articles reported, men were located on the first two pages of the sports section. Articles reporting both males and females accounted for 174 (14.6%) of Winter Olympic articles. In comparison, 7.1% of Winter Olympic articles reporting women were located on the first two pages of the sports section (see Table 11b). One hundred and seventy-seven (33.3%) of pictorials on the first page of the sports section were of men; while only 45 (8.4%) of pictorials on the first sports page were of women (see Table 11c).

Table 8

Subject Depicted in Winter Olympic Pictorials by Gender

Subject	Number of Pictorials			
	Male	Female	Both	N/A
Athlete	322	125	30	2
Coach	7	---	---	---
Non-Athlete	---	2	2	2
Official	2	2	2	1

Table 9a
Type or Theme of Winter Olympic Articles by Gender

Type/Theme	Number of Articles					
	Male	Mostly Male	Female	Mostly Female	Both	N/A
Athletic	344	16	82	8	129	1
Athletic/Commentary	20	---	1	1	9	---
Athletic/Human	50	2	18	2	37	2
Athletic/Scandal	19	---	4	---	4	---
Athletic/Weather	3	1	3	1	4	---
Commentary	36	---	5	---	20	6
Financial/Human	3	---	---	---	7	2
Human Interest	61	---	18	3	36	19
Human/Scandal	9	3	---	---	4	1
Multiple Themes	9	2	2	1	14	5
Scandal	54	1	5	1	7	8

Table 9b

Type or Theme of Winter Olympic Pictorials by Gender

Type/Theme	Number of Pictorials			
	Male	Female	Both	N/A
Athletic Action	133	55	16	1
Athletic Passive	34	12	9	---
Cartoon	---	--	1	2
Celebratory	43	28	9	1
Drawing	---	--	---	1
Human Interest	2	1	4	4
Head Shot	131	31	---	---
Not Applicable	3	4	2	1

Table 10

Performance Reported in Winter Olympic Articles by Gender

Performance	Number of Articles					N/A
	Male	Mostly Male	Female	Mostly Female	Both	
Medal Winning	191	19	80	14	144	2
Non-Medal Winning	323	2	49	4	74	11
Not Applicable	133	2	15	1	72	48

Table 11a

Location of Winter Olympic Articles and Pictorials

Location	Articles		Pictorials	
	Number	%	Number	%
Front Page	48	4.1	59	11.2
1st Sports Page	511	43.2	235	44.5
2nd Sports Page	304	25.7	110	20.7
3rd Sports Page	177	14.9	62	11.7
4th Sports Page	79	6.7	34	6.4
5th Sports Page	35	3.0	13	2.5
6th Sports Page	23	1.9	8	1.5
7th Sports Page	5	0.4	4	0.7
9th Sports Page	2	0.2	1	0.2
10th Sports Page	---	---	1	0.2
13th Sports Page	---	---	1	0.2

Table 11b

Location of Winter Olympic Articles by Gender

Location	Number of Articles					
	Mostly Male			Mostly Female		
	Male	Female	Both	Male	Female	Both
Front Page	21	2	4	1	15	5
1st Sports Page	300	10	55	9	119	18
2nd Sports Page	187	9	29	5	54	20
3rd Sports Page	77	---	37	3	52	8
4th Sports Page	34	---	9	---	32	4
5th Sports Page	16	1	5	---	8	5
6th Sports Page	9	1	3	---	9	1
7th Sports Page	2	---	1	1	1	---
9th Sports Page	1	---	1	---	---	---

Table 11c

Location of Winter Olympic Pictorials by Gender

Location	Number of Pictorials			
	Male	Female	Both	N/A
Front Page	33	15	10	1
1st Sports Page	177	45	11	2
2nd Sports Page	70	32	3	5
3rd Sports Page	34	20	8	---
4th Sports Page	18	8	7	1
5th Sports Page	6	6	1	---
6th Sports Page	6	2	---	---
7th Sports Page	1	2	1	---
9th Sports Page	---	1	---	---
10th Sports Page	---	--	---	---
13th Sports Page	1	--	---	1

Winter Olympics in General

A secondary purpose of this research was to identify trends in Globe and Mail sports coverage, primarily Winter Olympic Games coverage since the inception of the Winter Olympic Games.

Sport

Table 12 presents information on the subject of the articles; primarily the sport(s) that were covered. The most often covered sports were; ice hockey (29.5% of articles), figure skating (11.6%), alpine skiing (10.8%), and speed skating (6.2%). Articles written about multiple sports (3 sports or more) accounted for 17.8% of all articles surveyed. Of the sports listed, articles describing ski jumping, multiple sports, and the Winter Olympics in general comprised the largest average size (213.3 cm², 212.9 cm², and 202.2 cm² respectively) (see Figure 12a). Interestingly, articles describing Winter Olympic social activities had the largest mean size of all articles surveyed (304.5 cm²).

Ice hockey, alpine skiing, figure skating, and speed skating were the most popular sports portrayed in pictorials, a trend which was also found for articles (see Table 12).

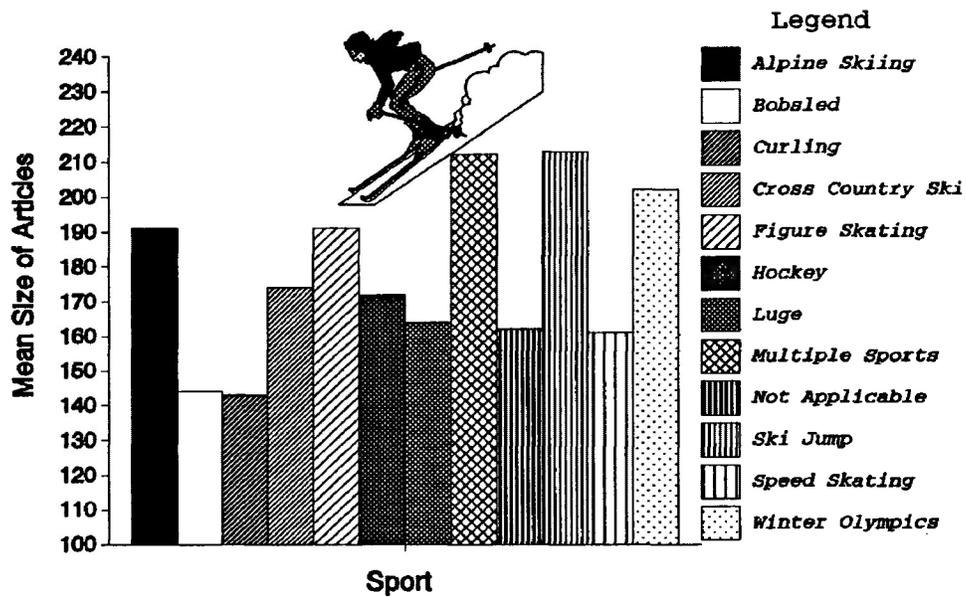


Figure 12a. The mean size (in cm²) of Winter Olympic articles appearing in the Globe and Mail by sport.

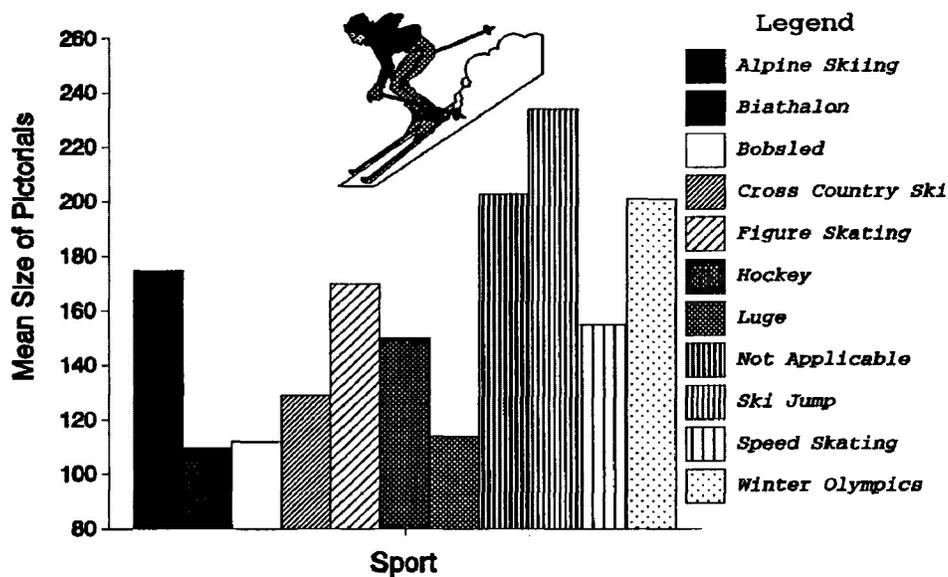


Figure 12b. The mean size (in cm²) of Winter Olympic pictorials appearing in the Globe and Mail by sport.

Table 12

Number of Winter Olympic Articles and Pictorials by Sport

Sport	Articles		Pictorials	
	Number	%	Number	%
Alpine Skiing	128	10.8	105	19.9
Biathalon	---	---	11	2.1
Bobsled	36	3.0	23	4.4
Curling	13	2.6	---	---
Cross Country Ski	31	1.1	13	2.5
Figure Skating	137	11.6	91	17.2
Hockey	349	29.5	157	29.7
Luge	14	1.2	14	2.7
Multiple Sports	211	17.8	---	---
Not Applicable	23	1.9	10	1.9
Opening Ceremonies	12	1.0	---	---
Ski Jump	22	1.9	16	3.0
Speed Skating	73	6.2	61	11.6
Winter Olympics	38	3.2	7	1.3
Total	1087	91.8	508	96.2

Note.Total articles does not equal 1184 (100%) as only sports/subjects which were represented 12 times (1% of total articles) or more are shown. (For a complete list, please see Appendix C)

Ice hockey, alpine skiing and figure skating accounted for 78.4% of all Winter Olympic pictorials depicted in the Globe and Mail. Of note, biathlon comprised more than 2% of all pictorials; while the biathlon barely accounted for 0.06% of all articles. Pictorials depicting ski jump were the greatest in mean size (234.7 cm²), while articles depicting the biathalon were the least in mean size (110.0 cm²) (see Figure 12b).

Affiliation

Articles that referred to more than two countries (multiple) appeared most frequently (324 or 27.4%). As the Globe and Mail is deemed Canada's national newspaper, it is not surprising that the second and third most frequently occurring articles were related to Canada (283 or 23.9%) and Canada with more than two other countries (188 or 15.9%) (see Table 13).

Performance

As might be expected, Winter Olympic articles describing medal winning performances had the greatest mean size (198.0 cm²). Articles describing a non-medal performance mean size was 189.0 cm² (see Figure 13a). However, Table 14 and Figure 14 indicate there was minimal difference in the frequency of articles devoted to medal winning performances (450 or 38.0%) and non-medal winning performances (463 or 39.1%).

Table 13

Frequency of Articles and Pictorials by Affiliation

Country/Affiliation	Article		Pictorial	
	Number	%	Number	%
Austria	---	---	10	1.9
Canada	283	23.9	284	53.8
Canada and Soviet Union	16	1.4	7	1.3
Canada and UK	16	1.4	---	---
Canada and USA	38	3.2	11	2.1
Canada and Others	188	15.9	27	5.1
East Germany	---	---	8	1.5
Finland	---	---	10	1.9
France	---	---	9	1.7
Italy	---	---	11	2.1
Multiple Countries	324	27.4	12	2.3
Norway	---	---	7	1.3
Not Applicable	---	---	9	1.7
USA	41	3.5	46	8.7
USA and Others	24	2.0	---	---
Soviet Union			---	---
Switzerland	---	---	12	2.3
United Kingdom	---	---	11	2.1
Total	930	78.5	489	92.6

Note.Percentage does not equal 100% as only countries or affiliations represented more than five times (1% of all articles) are shown.

Table 14

Frequency of Winter Olympic Articles by Performance Reported

Performance	Article	
	Number	%
Medal Winning	450	38.0
Non-Medal Winning	463	39.1
Not Applicable	271	22.9

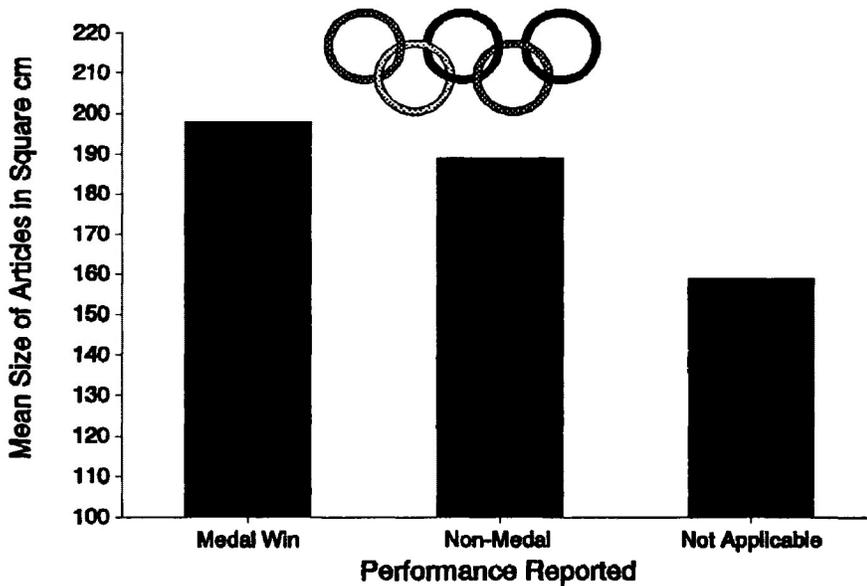


Figure 13a. The mean size (in cm²) of Winter Olympic articles as related to performance reported by year.

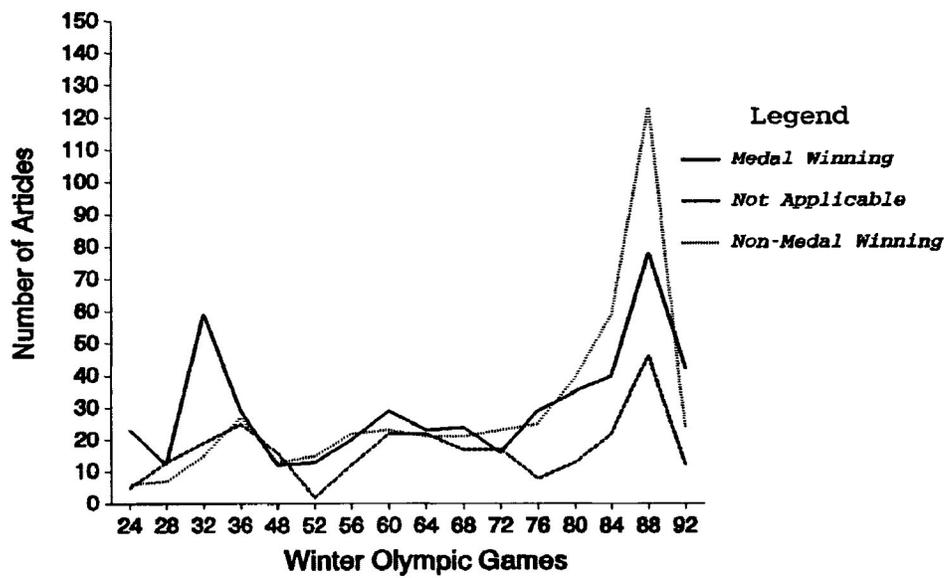


Figure 13b. The number of Winter Olympic articles as related to performance reported by year.

Type/Theme

The data presented in Table 15a indicates that the most popular type/theme of an article was athletically based. Articles discussing an athlete, an athletic accomplishment, or an athletic outcome constituted almost half (49%) of the 1184 Winter Olympic articles recorded in the Globe and Mail. Articles related to human interest, athletic and human interest combined, and scandal comprised 11.6%, 9.4%, and 6.4% of all articles surveyed.

The type of pictorials which afforded the most space were human interest, athletic action, and pictures depicting people celebrating. The largest pictures were actually pictures which were ambiguous or did not fall within the criterion outlined for type. Type of pictorials which occurred most frequently were athletic action (205) opposed to athletic passive (55). Head shots and celebratory pictorials accounted for 162 and 81 of all pictures (see Table 15b). Though head shots were numerous (30.7% of all pictures) they were relatively small in size (25.3 cm²).

Table 15a

Frequency of Winter Olympic Articles by Type or Theme

Type/Theme	Article	
	Number	%
Athletic	580	49.0
Athletic/Commentary	31	2.6
Athletic/Human Interest	111	9.4
Athletic/Scandal	27	2.3
Athletic/Weather	12	1.0
Commentary	67	5.7
Financial/Human Interest	12	1.0
Human Interest	137	11.6
Human Interest/Scandal	17	1.4
Multiple Themes	33	2.8
Scandal	76	6.4

Note. Percentage does not equal 100% as only themes that were represented 12 times (1% of total articles) or more are shown. (Complete list please see Appendix F)

Table 15b

Frequency of Winter Olympic Pictorials by Type or Theme

Type or Theme	Pictorials	
	Number	%
Athletic Action	205	38.8
Athletic Passive	55	10.4
Cartoon	3	0.6
Celebratory	81	15.3
Drawing	1	0.2
Human Interest	11	2.1
Head Shot	162	30.7
Not Applicable	10	1.9
Total	528	100.0

Note: Percentage may not equal 100% due to rounding.

Subject

Not surprisingly, the most common subject of pictorials were athletes themselves. The second most popular subject of pictorials were Olympic officials. Of note, articles depicting non-athletes were the greatest in size though few in number (see Table 16).

Table 16

Mean Size and Number of Winter Olympic Pictorials by Subject

Subject	Mean Size in cm ²	Pictorials	
		Number	%
Athlete	159.9	479	90.7
Coach	57.6	7	1.3
Non-Athlete	321.2	6	1.1
Official	139.6	15	2.8
Total		507	96.0

Note. Percentage does not 100% only subjects occurring 6 times (1% of total pictorials) or more are shown.

Newspaper Trends

The 1988 Calgary Games constituted the most Winter Olympic articles. The number of articles per Winter Olympics has generally increased each year (see Figure 14a). Consequently, the mean number of Winter Olympic articles per newspaper has steadily increased each Olympic Games (see Figure 14b). In addition the mean size of articles pertaining to the Winter Olympics has increased each year (see Figure 14c).

The Calgary Games also constituted the most Winter Olympic pictorials. Similar to Winter Olympic articles the number of pictorials in the Globe and Mail has increased each year (see Figure 16a). As a result the mean number of pictorials per newspaper has increased each Winter Olympic Games (see Figure 16b). Finally, the mean size of Winter Olympic pictorials also have increased each year (see Figure 16c).

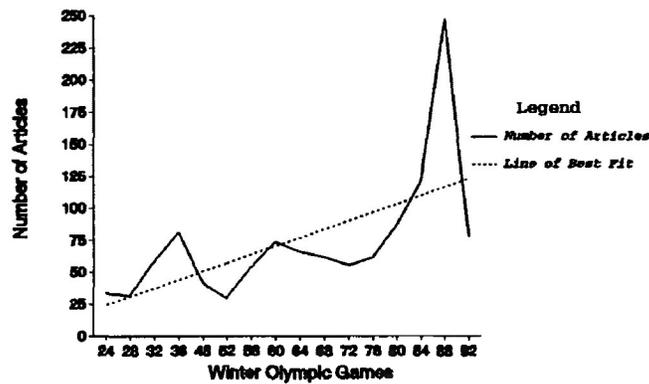


Figure 14a. The number of Winter Olympic articles appearing in the Globe and Mail by year.

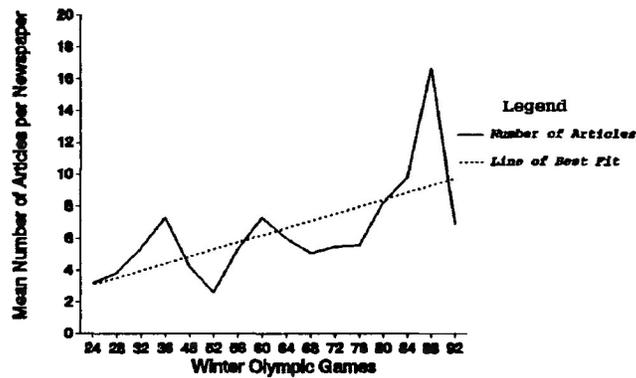


Figure 14b. The mean number of Winter Olympic articles per newspaper per year.

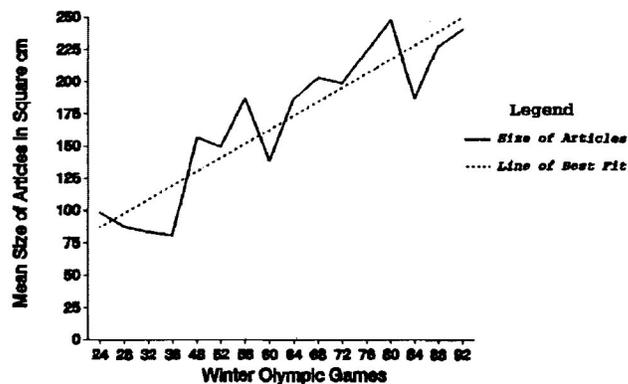


Figure 14c. The mean size (in cm²) of Winter Olympic articles by year.

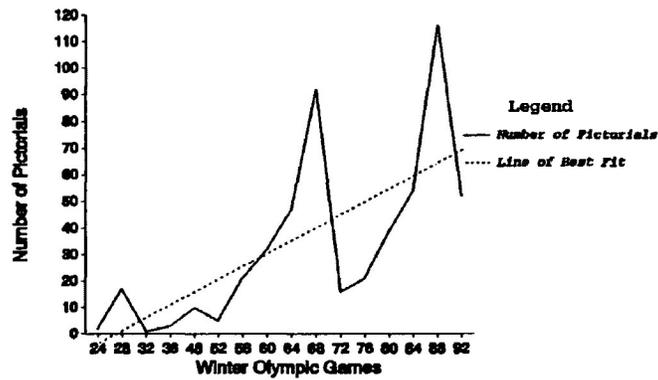


Figure 15a. The number of Winter Olympic pictorials appearing in the Globe and Mail by year.

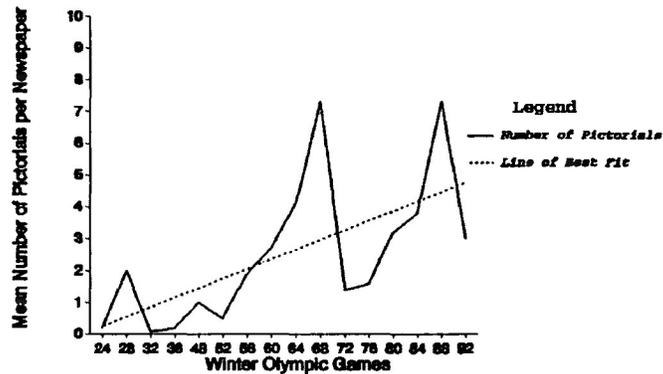


Figure 15b. The mean number of Winter Olympic pictorials per newspaper per year.

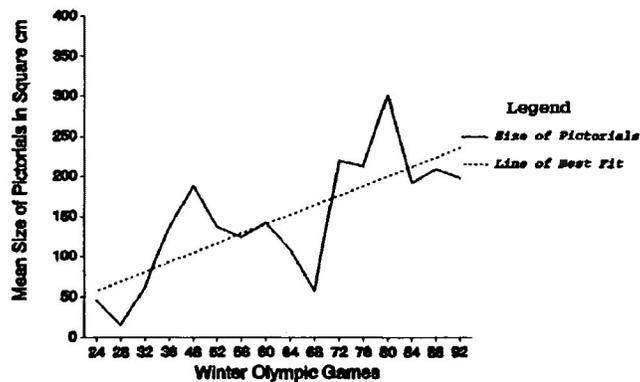


Figure 15c. The mean size (in cm²) of Winter Olympic pictorials by year.

CHAPTER 5

Discussion

The results of this study are consistent with similar studies pertaining to how the media depicts women in sport. Specifically, the Winter Olympic coverage by the Globe and Mail underrepresented women athletes compared to male athletes, utilized few female journalists, often trivialized female athletes by depicted women in "sex appropriate sports", and located female athletic achievements in the latter pages of the sports section.

Underrepresentation

Male athletes received over four times as much written coverage and close to three times as much pictorial coverage as female athletes. Of all articles surveyed 54.6% (647) were devoted to male athletes and only 12.2% (144) were devoted to female athletes. These findings are congruent with the findings of (Bryant, 1980; Crossman, et al, 1994; Gelinas & Theberge, 1986; Hilliard, 1984; Kane, 1989; Lumpkin & Williams, 1991; Mawsom & Ball, 1990; Theberge, 1991).

The disparity in coverage may be attributed to many factors. The large number of articles and pictorials about male athletes may reflect the emphasis on the coverage of ice hockey. Hockey accounted for almost 30% of all Globe and Mail Winter Olympic

coverage and is arguably the most popular Winter Olympic sport. Furthermore, until recently the Winter Olympics have only had a men's ice hockey championship (women's ice hockey will be an Olympic event in 1998). been a male domain in Olympic competition.

Demographically, the Globe and Mail may be considered Canada's newspaper for the upper level manager, the professional, the more educated, and the more affluent, areas that still tend to be dominated by males. The Globe and Mail is undoubtedly aware of the popularity of ice hockey in Canada and the demographics of its potential readers. From a business or profit perspective, the Globe and Mail is probably aspiring to deliver a product that it perceives meets the needs of the majority of the readers.

Males received far more coverage in the Globe and Mail, yet the mean size of articles and pictorials about female athletes tended to be larger than their male counterparts. A major contributing factor to this finding may be that Canadian female athletes won more individual medals than their male counterparts. This is especially true in alpine skiing and figure skating, two sports in which women received more text coverage than men, and two sports where Canadian women athletes have had a tradition of success. In addition, articles written about medal winners were larger than articles

about non-medal winners. Thus one logical conclusion is that the discrepancy of mean article size in favour of women may be due to the general success of Canadian female athletes. The discrepancy with respect to the mean size of pictorials may be attributed to the vast number of headshots (small photographs only depicting the athlete's face) of male athletes. These photographs are very small in nature thus lowering the mean size of pictorials depicting male athletes.

Other media play a pivotal role in determining what appears in the sports section. For example, if ice hockey and ski jumping (which only males compete in at the Olympics) are two of the most televised Olympic sports then it is probable that print media will cover the sports receiving the most exposure. Perhaps people may like to read about what they see and hear.

One role of the newspaper is to reflect society and give society a voice. The disparity in sport coverage may be born of society. Only 18% of all Winter Olympic competitors were women. Thus if the Globe and Mail reports the reality of the Olympics, women athletes are still underrepresented compared to male athletes. A vicious cycle has resulted. As women receive little sports coverage, the visibility of female athlete role models is minimized. Without role models there may be fewer future competitors, and fewer

competitors may result in less sports coverage. This potential cycle is alarming when considering many Canadians are trying to foster equality and acceptance. If potential role models are made less available, the quest for equality and acceptance is hindered via structural biases within the hierarchy of society.

Participation Rates

The issue of reporting reality, the availability of role models and the nature of sport coverage may be more accurately researched if participation rates are considered. One may determine if the underrepresentation of women in sport media is a function of biased journalism or biases in athletic participation. From 1924 to 1992, 82% of the competitors have been men and 80.4% of the articles have been about men. From 1924 to 1992, 18% of the competitors have been women and 19.6% of the articles have been about women. At a quick glance it appears that male and female athletes have been represented consistent rate to that of Winter Olympic participation rates of men and women. However, there was gross disparity of coverage in the years 1928, 1936, 1956, 1964, and 1984 when women received extremely poor coverage in relation to the number of female competitors (1928, 1936, 1956, 1964 and 1984 were five years when Canadian women did not win many medals, thus

media coverage may have been performance biased also). Furthermore, a positive correlation did not exist between participation rates and media representation. Is it the media's responsibility to promote female sport participation by covering more women's athletic events, or is it the various sports governing bodies' responsibility to promote female athletic participation, which in turn may give the sport media more women's athletic events to cover?

The Globe and Mail is Canada's national newspaper and is second in Canadian newspaper circulation. Thus the Globe and Mail is projecting many ideas and messages to Canadians, about Canadians. From 1924 to 1964 Canadian women received poor coverage proportional to the percentage of women participating in the Winter Olympics between 1924 and 1964. Though women's coverage was relatively high in 1948 when Barbara Ann Scott captured figure skating gold and in 1968 when alpine racer Nancy Greene won gold.

The current trend is that Canadian women are receiving proportionately more pictorial coverage than men. This may be attributed to the fact that Canadian women have been very successful in the last four Games including gold medal performances by Kathy Kriener (1976), Kathy Lee Gartner (1992). In general, Canadian coverage of Canadian athletes seems to following the

ebb and flow of Canadian success.

Source

Another common theme in current literature is that newspaper sports writing is primarily a male domain. In fact, the lack of female journalism in Globe and Mail Winter Olympic coverage is extraordinary considering that not one article was written by a women until 1976 and in 1992 only one article was written by a female reporter. Sport journalism is obviously a male stronghold (Anderson, 1983; Boutilier & San Giovanni, 1983; Bryant, 1980; Eberhard & Myers, 1988; Theberge, 1989; Theberge & Cronk, 1986). The implications of sport print media authors being predominantly male may be far reaching. People are inevitably affected by what media present to them. If the writers of the media are predominantly of one gender then there is potential that "another side of the story" or other noteworthy athletic accomplishments are being neglected. This division or segregation of gender in the Globe and Mail may be evident as the readers of the sports section are considered to be predominantly male (though this is not necessarily the case and there is little doubt that the demographics of sports page readers changed between from 1924 to 1992) and perhaps due to obvious gender barriers such as locker rooms.

Trivialize

Sport

The discrepancy between male and female Winter Olympic coverage may be a function of the Winter Olympic sports programme. Men only participate in ice hockey, ski jumping and bobsled while there are not any Winter Olympic sports that are exclusive to women. Figure skating was the only sport where female athletes received more coverage than male athletes in both articles and pictorials. Moreover, the majority of officials and all of the coaches in photographs were male. This visual message of males in positions of authority may send a strong message to the reader - there are no opportunities for women coaches and policy makers in sport. These findings painfully illustrate the theme of women being portrayed in "sex appropriate" sports and even "sex appropriate" positions of authority (Brocard, 1992, Bryant, 1980; Duncan & Sayaovong, 1990; Hilliard, 1984; Kane, 1989; Lumpkin & Williams, 1991; Reid & Soley, 1979; Rintala & Birrell, 1984; Rintala & Kane 1991; Theberge, 1991).

Location

Heroics of women athletes rarely appear on the front page of the newspaper or the first page of the sports section (the more frequently read pages). In fact, the front page and first two pages of the sports

section in the Globe and Mail carried articles on the achievements of male athletes six times more often than the accomplishments of female athletes. In contrast, the latter pages of the sports section carried articles about male athletes two times as often as female athletes. The latter pages of the newspaper may be read less frequently, therefore, fewer people may be reading about the accomplishments of female athletes, thus compounding the poor representation of women athletes. This segregation of gender by location may serve further to trivialize the athletic achievements of women (Boutilier & San Giovanni, 1983 and Bryant, 1980).

Performance

There was an obvious bias with respect to medal winning performances and gender. Women were most likely reported if they received a medal. In contrast, there were four times as many articles about men who did not win a medal. These findings are similar to a study by Klein, (1988). The emphasis of women only being represented when winning gives an excellent window into western society, namely: Women must excel in order to be recognized while men may get recognized for a less than stellar performance.

In absolute terms, the Globe and Mail coverage of the Winter Olympic Games has served to perpetuate the

misrepresentation of women in sport media. And as sport and the media are two of western society's most powerful socializing agents they may improve the social standing of one group or gender or they may deteriorate and oppress the social standing of a group or gender.

Obviously, female athletes are not receiving similar print media coverage as their male counterparts. This fact has direct effect on the latent information the Globe and Mail is sending to the reader. Often the information not reported in the media may be as important as the information presented in the media. For example, if women are continually underrepresented in sport media, the reader may think that women rarely participate in sport. In this scenario, sport media would be doing women a disservice by inaccurately portraying reality. Participant numbers may decline when events go unreported. Conversely, publicity can have a substantial effect on subsequent participation rates (For example, Gaetan Boucher's publicized efforts in speed skating could have contributed to the rise in the number of Canadians involved in speed skating).

Winter Olympics in General

Sport

Ice hockey was the sport most frequently covered sport throughout the Winter Olympic Games. Canadian

success in hockey and its national popularity inevitably make ice hockey a journalistic must. The upcoming addition of women's ice hockey to the Olympics should assure hockey its marquis status for many more Olympics. Alpine skiing and figure skating are the second and third most popular sports. The three most represented Olympic sports also happen to be the only three Olympic sports where athletes may have lucrative professional careers either through contracts or sponsorship. This may be a contributing factor as to why sports which have a more amateur flavour, such as speed skating and cross-country skiing receive less media coverage.

Performance

The emphasis of Globe and Mail Winter Olympic Games coverage is clearly on winning. Articles describing a medal winning performance occurred as frequently and were larger in size than articles describing a non-medal winning performance. The stress on winning may be a result of Canadian and other "westernized societies'" social orientation toward winning, competition, and the "bottom line." Consequently, being first tends to be conspicuous and possibly necessary in the business world, the political world, the social world and the sports world.

Newspaper Trends

Generally, Globe and Mail coverage of the Winter Olympic Games has increased each Olympic year. The number of Winter Olympic articles has climbed steadily since 1924. The aberration of coverage in 1988 (1988 received a tremendous amount of Globe and Mail attention) is most likely due to the fact that the Winter Olympics were held in Canada, making the Winter Olympics more important to Canadians and allowing more opportunities for Canadian journalists. This may be attributed to Canada hosting the 1988 Games, thus heightening the significance of the Games to Canadians. Coverage of the 1992 Winter Olympics was substantially less than 1988 coverage. In addition, the Globe and Mail underwent a format change in 1990 which resulted in a down-scaling (limiting the sports section to two pages and occasionally three pages on weekends) of the entire sports section. Perhaps the 1992 Winter Olympic coverage reflected this change in newspaper format.

CHAPTER 6

Summary Recommendations and Conclusions

Summary

The purpose of this research was to collect empirical data on the Globe and Mail sports section coverage of all Modern Winter Olympic Games, focusing on the coverage of male and female athletes in relation to Winter Olympic participation rates. All Globe and Mail newspapers (177) printed that transpired during the Winter Olympic Games time frame were analyzed. Content Analysis was performed on 1,184 articles and 532 pictorials appearing in the Globe and Mail that related to the Winter Olympic Games. Variables used to examine text and pictorials included: size, gender reported/depicted, sport, location, type, performance reported, affiliation and source of article. Frequency counts and percentages were used to compare the coverage of male and female athletes. One-way ANOVA and ANOVA with a Student-Newman-Keuls procedure were used to determine if significant differences existed between the above indices.

The author discovered that male Winter Olympic athletes are written about four (647 to 144) times as much-and photographed three (346 to 131) times as much as their female counterparts. Coverage of male and female athletes though similar in nature, did not

correlate with participation rates of male and female athletes. Articles were written by male reporters almost six (431 to 75) times more frequently than female reporters. Exploits of female athletes tended to be trivialized. For example, the only sport in which women received more coverage than men was figure skating which may be deemed as a "sex appropriate" sport. Text and pictorials pertaining to women were six times less likely (than text and pictorials about men) to appear at the beginning of the sports section.

Of note, the mean size of articles about female athletes was deemed significantly larger than the articles about male athletes ($F(1,6) = 5.41, p=.001$).

In general, ice hockey was the most frequently reported sport. Oddly, just over half of the articles surveyed did not pertain to sport itself but to human interest and scandalous stories. The Globe and Mail coverage of the Winter Olympic Games has increased steadily over time (coverage in 1992 defied the trend, possibly, due to the Globe and Mail format change).

Conclusions

This research identified recurring gender bias themes that are unfortunately wide spread through most media. The Winter Olympic coverage by the Globe and Mail; underrepresented women athletes compared to male athletes, utilized few female journalists, often

trivialized female athletes by depicting women in "sex appropriate sports", and located female athletic achievements in the latter pages of the sports section.

Recommendations

The present research identified the discrepancy between male and female sport coverage. But the trend seems to be that women are receiving better sport coverage. Further monitoring of sport journalism is needed to ascertain whether sport reporting is becoming more equitable.

Additional research could focus on participation rates and perhaps examine the media's influence of sport participation in general.

Lastly, this research investigated the quantitative aspect of sport journalism and further insight may be gained by focusing on the qualitative aspect of sport journalism. After all, what is said may carry more weight than how much is said.

References

- Anderson, D. A. (1983). Sports coverage in daily newspapers. Journalism Quarterly, 60 (3), 497-500.
- Boutilier, M., & San Giovanni, L. (1983). The Sporting Woman, pp. 184-218. Champaign, Illinois: Human Kinetics.
- Brocard, C. (1992). C'image de la femme sportive dans la publicite. Revue des Sciences et Techniques des Activites Physiques et Sportives, 13 (28), 83-97.
- Bryant, J, (1980). A two year selective investigation of the female in sport as reported in the paper media. Arena Review, 4 (2), 32-44.
- Buysse, J. A. (1991, Nov.). Differential media treatment in sport and gender difference: An analysis of photographic presentations of intercollegiate athletes on NCAA Division 1 media guides. NASSS Conference, Milwaukee.
- Coulter, B. J. (1986). The Canadian press and the problem of responsible journalism: An Olympic case study. Journal of Sport and Social Issues, 10 (2), 27-48.
- Crossman, J., Hyslop, P., & Guthrie, B. (1994). A content analysis of the sports section of Canada's national newspaper with respect to gender and professional and amateur status. International Review for the Sociology of Sport, 29 (2), 123-131.

- Duncan, M.C., Sayaovong, A. (1990). Photographs images and gender in Sports Illustrated for kids. Play and Culture, 3 (2), 91-116.
- Eberhard, W. B., & Myers, M. L. (1988). Beyond the locker room: Women in sports on major daily newspapers. Journalism Quarterly, 65 (3), 595-599.
- Eitzen, D. S. (1989). Sport in contemporary society: An Anthology (3rd ed.). New York: St. Martin's. Eitzen, D. S., & Sage, G. H. (1989). Sociology of North American Sport (4th ed.). Dubuque: Wm. C. Brown.
- Fasting, K., & Tangen, J. (1983). Gender and sport in Norwegian mass media. International Review of Sport Sociology, 1 (18), 61-70.
- Fillion, J. (Eds.). (1990). The Canadian World Almanac 1991. Toronto: Global.
- Gay L. R. (1987, Third Edition). Educational Research: Competencies for analysis and application, pp. 205-207. Columbus: Merrill.
- Gelinas, M., & Theberge, N. (1986). A content analysis of the coverage of physical activity in two Canadian newspapers. International Review for the Sociology of Sport, 21 (2/3), 141-151.

- Griffiths, A. (1978). Media and the Commonwealth Games. Journal of the Canadian Association for Health Physical Education and Recreation, 44 (4), 26-29.
- Hilliard, D. C. (1984). Media images of male and female professional athletes: an interpretive analysis of magazine articles. Sociology of Sport Journal, 1 (3), 251-262.
- Kane, M. J. (1989). The post Title IX female athlete in the media: things are changing, but how much? Journal of Physical Education Recreation and Dance, 60 (3), 58-62.
- Kane, M. J. (1988). Media coverage of the female athlete before, during, and after Title IX: Sports Illustrated revisited. Journal of Sport Management, 2 (2), 87-99.
- Kidd, B. (1987). The Olympic movement and the sports-media complex. In R. Jackson and T. McPhail (conference organizers), Olympic Movement and Mass Media Conference (pp.1.3-1.10). Calgary, Alberta, Canada: Hurford Enterprises Ltd.
- Klein, M. L. (1988). Women in the discourse of sport reports. International Review for the Sociology of Sport, 23 (2), 139-152.
- Lever, J., & Wheeler, S. (1984). The Chicago Tribune sports page, 1900 - 1975. Sociology of Sport Journal, 1 (4), 299-313.

- Lumpkin, A., & Williams, L. D. (1991). An analysis of Sports Illustrated feature articles, 1954 - 1987. Sociology of Sport Journal, 8 (1), 16-32.
- Mawson, L. M., & Ball, L. A. (1990, Nov.). Media coverage of women's and men's teams participating in the NAIA Basketball Championships. NASSS Conference, Denver.
- McGregor, E. (1989). Mass media and sport: Influences on the public. Physical Educator, 46 (1), 52-55.
- McKay, J., & Rowe, D. (1987). Ideology, the media, and Australian sport. Sociology of Sport Journal, 4 (3), 258-273.
- Morrow, D. (1987). Newspapers: Selected aspects of Canadian sport journalism and the Olympics. In R. Jackson and T. McPhail (conference organizers), Olympic Movement and Mass Media Conference (pp.2.13-2.23). Calgary, Alberta, Canada: Hurford Enterprises Ltd.
- Orlick, T., & Botterill, C. (1976) Every kid can win. Chicago: Nelson-Hall.
- Pfister, G. (1987). Women in the Olympics (1952 - 1980): An analysis of German newspapers (beauty awards vs. gold medals). In R. Jackson and T. McPhail (conference organizers), Olympic Movement and Mass Media Conference (pp.11.27-11.33). Calgary, Alberta, Canada: Hurford Enterprises Ltd.

- Reid, L. N., & Soley, L. C. (1979). Sports Illustrated coverage of women in sports. Journalism Quarterly, 56 (4), 861-863.
- Rintala, J., & Kane, M. J. (1991, Nov.). Culturally constructed factors that mediate the media's portrayal of female athleticism: The case of age, race and disability. NASSS Conference, Milwaukee.
- Rintala, J., & Birrel, S. (1984). Fair treatment for the active female: A content analysis of Young Athlete magazine. Sociology of Sport Journal, 1 (3), 231-250.
- Rutherford, P. (1978). The making of the Canadian media. Toronto, Ontario, Canada: McGraw-Hill Ryerson Ltd.
- Smith, G. J., & Blackman, C. (1978). Sport in the mass media. Sociology of Sport Monographs of the Canadian Association for Health, Physical Education and Recreation, Series A.
- Stevens, J. (1987). In W. Huntington (Ed.). Sports and mass media. Gannet Center Journal, 1 (2), 1-150.
- Surface, B. (1972, Feb./Nov.). The shame of the sports beat. Columbia Journalism Review, 2 (1), 49.
- Theberge, N. (1991). A content analysis of print media coverage of gender, women and physical activity. Journal of Applied Sports Psychology, 3 (1), 36-48.

- Theberge, N. (1989). A feminist analysis of responses to sport violence: Media coverage of the 1987 World Junior Hockey Championship. Sociology of Sport Journal, 6 (3), 247-256.
- Theberge, N., & Cronk, A. (1986). Work routines in newspaper sports departments and the coverage of women's sports. Sociology of Sport Journal, 3 (3), 195-203.
- Toohey, D. P. (1986). The media coverage of the Los Angeles Olympic Games by selected California newspapers. United States Olympic Academy, tenth session proceedings (pp.171-183). Colorado Springs.
- Valgeirsson, G., & Snyder, E. E. (1986). A cross-cultural comparison of newspaper sports sections. International Review for the Sociology of Sport, 21 (2/3), 131-140.
- Williams, C. L., Lawrence, G., & Rowe, D. (1986). Patriarchy, media and sport. In G. Lawrence and D. Rowe (Eds.), Power play: Essays in the Sociology of Australian Sport, pp. 215-229. Sydney, Australia: Hall and Cremonger.
- Wiseman, J. P., & Aron, M.S. (1970). Field Projects for Sociology Students, Cambridge, Mass.: Schenkman.

Women's Sports Get Short Shrift in Canada's Dailies.
(1991, October). News release filed to Canadian
Press.

Appendices

Appendix A Frequency of Articles Written About Male and Female Athletes Exclusively

Year	Number of Articles			% of Articles	
	Male	Female	Total	Male	Female
1924	28	2	30	93.3	6.7
1928	25	0	25	100.0	0.0
1932	46	4	50	92.0	8.0
1936	67	0	67	100.0	0.0
1948	19	13	32	59.4	40.6
1952	20	6	26	76.9	23.1
1956	40	3	43	93.0	7.0
1960	44	9	53	83.0	17.0
1964	40	3	43	93.0	7.0
1968	28	18	46	60.9	39.1
1972	25	8	33	75.8	24.2
1976	16	13	29	55.2	44.8
1980	51	13	64	79.7	21.3
1984	77	18	95	81.1	18.9
1988	120	42	162	74.1	25.9
1992	24	11	35	68.6	31.4
Total	670	163	833	80.4	19.6

Note. For brevity and clarity: Articles written about mostly male athletes are deemed as written about male athletes. Articles written about mostly female athletes are deemed as written about female athletes. Articles written about both female and male athletes and/or are considered not applicable are not shown in the table.

Appendix B**Mean Size and Frequency of the Source of Articles**

Source	Size in cm ²	Standard Deviation	Articles	
			Number	%
Associated Press	109.5	78.4	65	5.5
Associated Press/NYTS	78.0	0.0	1	0.1
Associated Press/Staff	74.0	0.0	1	0.1
Associated Press/UPC	172.0	49.4	2	0.2
Associated Press/UPI	148.3	69.9	6	0.5
Male/Female author	226.2	46.7	9	0.8
Canadian Press	155.0	90.4	263	22.2
Canadian Press/AP	137.8	87.4	6	0.5
Canadian Press/Reuters	147.5	112.4	2	0.2
Canadian Press/Staff	276.2	134.9	4	0.3
Canadian Press/UPC	145.5	173.2	2	0.2
Canadian Press/UPI	195.1	120.8	8	0.7
Female author	248.7	76.2	75	6.3
Globe and Mail	136.2	62.4	4	0.3
Letter from Reader	402.0	200.8	2	0.2
Male author	245.9	137.4	431	36.4

Appendix B (cont)

Male author/AP	162.0	56.5	2	0.2
Male author/CP	203.8	66.0	18	1.5
Multiple sources	245.6	74.2	5	0.4
Male author/UP	222.0	35.6	3	0.3
not available	98.7	89.2	147	12.4
New York Times Service	222.4	78.6	7	0.6
NYTS/Reuters	280.0	0.0	1	0.1
NYTS/UPI	133.0	0.0	1	0.1
Reuters	108.7	94.4	13	1.1
Reuters/UPI	120.5	50.2	2	0.2
Special	188.6	56.7	3	0.3
Staff	179.1	95.9	22	1.9
United Press	107.5	54.5	8	0.7
United Press Canada	126.0	0.0	1	0.1
UP International	112.0	72.2	70	5.9
Total	184.7	122.6	1184	100.0

Appendix C**Mean Size and Frequency of Articles According to the Sport or Subject being reported**

Sport/ Subject	Size in cm ²	Standard Deviation	Articles	
			Number	%
Alpine/Figure	203.5	2.1	2	0.2
Alpine/Hockey	180.5	180.3	2	0.2
Alpine	190.9	125.3	128	10.8
Alpine/Jump	288.5	28.9	2	0.2
Alpine/Luge	138.5	48.7	2	0.2
Alpine/Nordic	189.0	.0	1	0.1
Alpine/Speed	273.5	72.4	4	0.3
Biathalon/Figure	60.0	.0	1	0.1
Biathalon	194.2	111.0	8	0.7
Biathalon/X-Country	62.5	31.8	2	0.2
Bobsled	144.7	89.4	36	3.0
Bobsled/Speed	115.0	.0	1	0.1
Bobsled/X-Country	315.0	.0	1	0.1
Closing Ceremonies	165.6	81.7	3	0.3
Curling	142.6	98.9	13	1.1

Appendix C (cont)

Dogsled	48.0	.0	1	0.1
Figure/Hockey	200.7	142.8	4	0.3
Figure/Speed	160.6	128.0	3	0.3
Figure	191.1	103.1	137	11.6
Figure/X-Country	154.0	.0	1	0.1
Financial Issues	191.7	47.0	8	0.7
Flag	31.5	16.2	2	0.2
Free Style	157.0	95.2	7	0.6
Hockey/Open	163.0	.0	1	0.1
Hockey/Speed	143.6	56.5	3	0.3
Hockey/X-Country	64.0	.0	1	0.1
Hockey	171.9	119.1	349	29.5
Jump/X-Country	159.3	57.0	3	0.3
Jump	213.2	127.6	22	1.9
Jump/Nordic	80.0	.0	1	0.1
Luge	164.3	70.3	14	1.2
Luge/Jump	294.0	.0	1	0.1
Media	103.5	37.4	2	0.2
Multiple sports	212.0	122.8	211	17.8
Not Available	162.7	126.2	23	1.9

Appendix C (cont)

Nordic Combined	130.1	81.5	6	0.5
Olympics in general	202.1	232.6	38	3.2
Opening Ceremonies	165.2	96.8	12	1.0
Pins	98.0	.0	1	0.1
Religion	187.0	.0	1	0.1
Social Activities	304.5	272.4	8	0.7
Speed/X-Country	279.0	33.9	2	0.2
Speed	160.8	103.2	73	6.2
Tickets	192.0	.0	1	0.1
Torch	205.3	91.6	3	0.3
Tourism	246.0	.0	1	0.1
Transportation	310.0	54.1	4	0.3
Weather	316.3	217.0	3	0.3
X-Country	174.1	93.3	31	2.6
Total	184.7	122.6	1184	100.0

Appendix D**Mean Size and Frequency of Pictorials According to Sport**

Sport	Size in cm ²	Standard Deviation	Pictorials	
			Number	%
Total	162.7	231.6	528	100.0
Olympics in General	222.2	145.9	7	1.3
Alpine Skiing	174.7	124.7	105	19.9
Biathalon	110.0	133.4	11	2.1
Bobsled	111.9	113.8	23	4.4
Medal Ceremony	322.0	48.9	4	0.8
Closing Ceremonies	178.0	0.0	1	0.2
Cross Country Skiing	128.6	142.1	13	2.5
Curling	113.0	48.5	3	0.6
Figure Skating	170.1	119.7	91	17.2
Free Style skiing	239.7	55.5	4	0.8
Hockey	150.0	132.3	157	29.7
Ski Jumping	234.6	197.3	16	3.0
Luge	114.7	113.2	14	2.7
Multiple Sports	194.7	77.0	4	0.8
Not Applicable	203.1	176.3	10	1.9
Nordic Combined	255.5	202.9	2	0.4
Opening Ceremonies	315.5	142.1	2	0.4
Speed Skating	155.1	130.5	61	11.6

Appendix E

The Mean Size and Frequency of Pictorials According to the Subject of the Pictorial

Subject	Size in cm ²	Standard Deviation	Pictorials	
			Number	%
Athlete	159.9	129.0	479	90.7
Athlete and Coach	225.0	0.0	1	0.2
Athlete and Fans	364.4	234.4	5	0.9
Athlete and non-ath	143.0	0.0	1	0.2
Athlete and Official	115.3	52.7	3	0.6
Coach and Official	94.0	0.0	1	0.2
Coach	57.5	36.8	7	1.3
Fans	231.3	124.6	3	0.6
Multiple Subjects	222.5	173.2	2	0.4
not applicable	205.0	28.2	2	0.4
Non-Athlete	321.1	160.1	6	1.1
Official	139.6	127.6	15	2.8
Olympics in General	247.0	0.0	1	0.2
Opening Ceremonies	357.0	0.0	1	0.2
Rules	150.0	0.0	1	0.2
Total	162.7	131.6	528	100.0

Appendix F**The Mean Size and Frequency of Articles According to the Type or Theme**

Type/Theme	Size in cm ²	Standard Deviation	Articles	
			Number	%
Athletic	174.9	101.5	580	49.0
Athletic/Commentary	267.4	125.4	31	2.6
Athletic/Financial	390.0	0.0	1	0.1
Athletic/Human Int.	226.5	120.0	111	9.4
Athletic Nostalgia	384.0	0.0	1	0.1
Athletic/Politics	209.0	122.3	6	0.5
Athletic/Scandal	197.6	140.9	27	2.3
Athletic/Weather	215.5	98.1	12	1.0
Commentary	232.0	147.7	67	5.7
Commentary/Financial	36.0	0.0	1	0.1
Commentary/Human Int.	284.5	74.6	9	0.8
Commentary/Media	272.5	24.7	2	0.2
Commentary/Nostalgia	205.0	0.0	1	0.1
Commentary/Scandal	210.7	127.2	10	0.8
Financial	46.0	51.0	3	0.3

Appendix F (cont)

Financial/Human Int.	130.1	61.3	12	1.0
Financial/Politics	149.4	101.6	5	0.4
Financial/Scandal	240.7	126.6	4	0.3
Human Interest	160.9	134.1	137	11.6
Human Interest/Media	82.0	0.0	1	0.1
Human Interest/Nost.	203.5	189.4	4	0.3
Human Interest/Politic	302.5	501.4	7	0.6
Human Interest/Scandal	147.2	82.7	17	1.4
Human Interest/Weather	189.7	131.3	4	0.3
Multiple	257.4	153.5	33	2.8
Nostalgia	153.5	178.8	2	0.2
Politics	73.3	88.2	9	0.8
Politics/Scandal	131.0	117.9	3	0.3
Scandal	135.8	76.4	76	6.4
Scandal/Weather	162.2	107.0	5	0.4
Weather	92.5	94.0	2	0.2
Total	184.7	122.6	1184	100.0

Appendix G**Mean Size and Frequency of Pictorials According to Type**

Type	Size in cm ²	Standard Deviation	Pictorials	
			Number	%
Athletic Action	232.8	116.2	205	38.8
Athletic Passive	191.8	95.2	55	10.4
Cartoon	146.3	80.5	3	0.6
Celebratory	219.7	104.0	81	15.3
Drawing	106.0	0.0	1	0.2
Human Interest	239.1	77.8	11	2.1
Human Int./Scandal	25.3	34.9	162	30.7
not applicable	259.7	155.9	10	1.9
Total	162.7	131.6	528	100.0

Appendix H**The Mean Size and Frequency of Articles According to the Sports Page they Occur on**

Sports page	Mean Size cm ²	Standard Deviation	Articles	
			Number	%
First	181.1	127.6	511	43.2
Second	173.8	140.5	304	25.2
Third	206.8	99.7	177	14.9
Fourth	217.6	86.5	79	6.7
Fifth	204.6	78.9	35	3.0
Sixth	211.7	77.1	23	1.9
Seventh	199.6	197.1	5	0.4
Eighth	0.0	0.0	0	0.0
Ninth	112.0	52.3	2	0.2
Front Page	131.8	74.6	48	4.1
Total	184.7	122.6	1184	100.0

Appendix I

The Mean Size and Frequency of Pictorials According to Location in the Newspaper

Sports Page	Size in cm ²	Standard Deviation	Pictorials	
			Number	%
First	124.0	136.9	235	44.5
Second	157.6	107.3	110	20.8
Third	221.0	120.1	62	11.7
Fourth	208.3	141.2	34	6.4
Fifth	222.6	116.7	13	2.5
Sixth	140.0	88.7	8	1.5
Seventh	240.7	107.9	4	0.8
Ninth	52.0	0.0	1	0.2
Tenth	307.0	0.0	1	0.2
Thirteenth	249.0	0.0	1	0.2
Front Page	121.6	113.3	59	11.2
Total	162.7	131.6	528	100.0

Appendix J**Total Number of Winter Olympic Competitors**

Year	Number of Competitors			%of Competitors	
	Male	Female	Total	Male	Female
1924	281	13	294	96	4
1928	468	27	495	96	4
1932	274	32	306	90	10
1936	675	80	755	89	11
1948	636	77	713	89	11
1952	623	109	732	85	15
1956	686	132	818	84	16
1960	521	144	665	78	22
1964	986	200	1186	83	17
1968	1081	212	1293	84	16
1972	1015	217	1232	82	18
1976	900	228	1128	80	20
1980	833	234	1067	78	22
1984	1180	409	1589	74	26
1988	1128	317	1445	78	22
1992	1313	488	1801	73	27
Total	12600	2919	15519	82	18

Appendix K**The Mean Size and Frequency of Pictorials According to Day of Location**

Day of Competition	Size in cm ²	Standard Deviation	Pictorials	
			Number	%
1	57.6	103.9	96	18.2
2	190.9	139.5	27	5.1
3	218.9	139.8	30	5.7
4	196.4	116.4	30	5.7
5	138.3	113.2	51	9.7
6	199.9	133.8	41	7.8
7	194.6	120.3	30	5.7
8	166.4	111.6	37	7.0
9	209.3	128.2	28	5.3
10	201.4	165.7	42	8.0
11	172.5	96.8	24	4.5
12	205.6	114.8	23	4.4
13	179.4	108.1	21	4.0
14	182.0	120.2	12	2.3
15	251.7	94.6	9	1.7
16	171.7	108.9	18	3.4
17	115.4	98.0	9	1.7
Total	162.7	131.6	528	100.0

Appendix L**The Mean Size and Frequency of Articles according to the Day of Olympic Competition**

Day of Competition	Mean Size cm ²	Standard Deviation	Articles	
			Number	%
1	179.6	138.6	75	6.3
2	156.6	128.5	81	6.8
3	183.6	130.6	93	7.9
4	230.3	116.5	57	4.8
5	176.7	122.7	103	8.7
6	165.6	112.9	99	8.4
7	193.5	115.9	101	8.5
8	168.7	106.7	118	10.0
9	162.5	110.8	91	7.7
10	180.7	150.7	110	9.3
11	195.9	112.7	64	5.4
12	194.1	117.2	83	7.0
13	217.9	90.6	54	4.6
14	230.0	119.5	22	1.9
15	239.4	77.5	16	1.4
16	254.9	147.5	17	1.4
Total	184.7	122.6	1184	100.0

Appendix M**The Mean Size and Frequency of Articles According to the Olympic Year**

Year	Size in cm ²	Standard Deviation	Articles	
			Number	%
1924	99.2	105.6	34	2.8
1928	88.5	62.2	32	2.7
1932	84.2	63.9	59	5.0
1936	81.7	59.6	81	6.8
1948	157.3	137.2	41	3.5
1952	150.0	78.3	30	2.5
1956	187.0	117.0	54	4.6
1960	139.2	93.8	74	6.3
1964	187.6	103.6	66	5.6
1968	204.8	106.2	62	5.2
1972	199.2	115.8	56	4.7
1976	224.7	97.4	62	5.2
1980	248.0	206.1	87	7.3
1984	187.4	117.5	121	10.2
1988	228.1	93.6	247	20.9
1992	241.1	106.9	78	6.6
Total	184.7	122.6	1184	100.0

Appendix N**The Mean Size and Frequency of Pictorials According to Olympic Year**

Year	Size in cm ²	Standard Deviation	Pictorials	
			Number	%
1924	46.0	14.1	2	0.4
1928	15.5	7.9	17	3.2
1932	61.0	0.0	1	0.2
1936	135.3	56.0	3	0.6
1948	188.8	69.8	10	1.9
1952	137.2	79.9	5	0.9
1956	124.3	81.6	21	4.0
1960	142.6	82.0	32	6.1
1964	109.2	88.3	47	8.9
1968	57.6	110.4	92	17.2
1972	220.5	177.2	16	3.0
1976	213.2	141.8	21	4.0
1980	301.9	155.6	39	7.4
1984	192.9	91.6	54	10.2
1988	210.4	120.2	116	22.0
1992	198.5	98.3	52	9.8
Total	162.7	131.6	528	100.0

Appendix O**The Total Number of Pages, Sport Pages, and Newspapers
According to Olympic Year**

Year	Total Pages	Standard Deviation	Sport Pages	Standard Deviation	Number of papers
1924	18.4	2.6	2.3	0.4	10
1928	22.2	3.6	2.3	0.5	8
1932	18.1	2.2	3.1	0.4	11
1936	18.0	1.6	2.8	0.7	10
1948	29.5	1.9	3.3	0.7	9
1952	29.2	3.1	3.6	1.0	11
1956	38.2	5.0	4.2	1.0	10
1960	36.0	6.3	4.0	1.1	10
1964	38.1	6.6	4.3	0.5	11
1968	40.0	8.3	4.1	1.2	12
1972	46.0	7.4	5.8	2.5	10
1976	47.8	8.2	5.5	1.2	11
1980	59.2	15.0	7.2	1.9	10
1984	77.5	18.3	7.4	2.5	12
1988	78.2	15.4	8.3	1.9	14
1992	66.5	13.8	3.5	0.5	14
Total	43.3	22.1	4.6	2.2	173

Appendix P**The Mean Size and Frequency of Articles according to Affiliation**

Affiliation	Size in cm ²	Standard Deviation	Articles	
			Number	%
Austria	86.0	59.2	9	0.8
Austria/Czechoslovakia	84.0	0.0	1	0.1
Austria/Italy	115.0	0.0	1	0.1
Austria/Japan	85.0	0.0	1	0.1
Austria/Sweden	25.0	0.0	1	0.1
Austria/multiple	168.4	73.9	7	0.6
Belgium/Switzerland	20.0	0.0	1	0.1
Canada	181.1	126.6	283	23.9
Canada/Austria	185.2	183.6	5	0.4
Canada/C.I.S.	283.0	0.0	1	0.1
Canada/Czechoslovakia	246.3	32.0	6	0.5
Canada/East Germany	273.5	137.8	2	0.2
Canada/Finland	157.2	106.5	5	0.4
Canada/France	166.1	106.6	6	0.5
Canada/Germany	202.5	92.5	9	0.8

Appendix P (cont)

Canada/Hungary	194.0	0.0	1	0.1
Canada/Italy	335.0	0.0	1	0.1
Canada/Japan	360.0	0.0	1	0.1
Canada/Netherlands	204.0	0.0	1	0.1
Canada/Norway	43.2	38.3	4	0.3
Canada/Poland	117.5	63.3	4	0.3
Canada/Soviet Union	203.7	129.3	16	1.4
Canada/Sweden	189.0	101.7	11	0.9
Canada/Switzerland	342.5	14.8	2	0.2
Canada/United Kingdom	86.5	58.3	16	1.4
Canada/United States	162.4	103.9	38	3.2
Canada/West Germany	327.0	0.0	1	0.1
Canada/multiple	215.4	117.2	188	15.9
China	81.0	53.7	2	0.2
Czechoslovakia/Finland	93.5	45.9	2	0.2
Czechoslovakia/Soviet	119.6	28.2	3	0.3
Czechoslovakia/Sweden	115.6	73.5	3	0.3
Czechoslovakia/U.K.	77.0	0.0	1	0.1
Czechoslovakia/U.S.A.	135.3	49.2	6	0.5
Czechoslovakia/W.G.	69.5	71.4	2	0.2
East Germany	255.0	130.0	3	0.3

Appendix P (cont)

East Germany/U.S.A.	211.0	24.0	2	0.2
East Germany/multiple	150.6	39.6	5	0.4
exotic countries	176.0	41.0	2	0.2
Finland	195.0	120.2	2	0.2
Finland/Japan	57.5	48.7	2	0.2
Finland/Norway	125.0	0.0	1	0.1
Finland/Soviet Union	57.0	60.8	2	0.2
Finland/Sweden	121.0	0.0	1	0.1
Finland/West Germany	161.0	0.0	1	0.1
Finland/multiple	324.0	0.0	1	0.1
France	178.3	116.5	8	0.7
France/Poland	131.0	0.0	1	0.1
France/multiple	143.0	110.3	2	0.2
Germany	24.3	0.5	3	0.3
Germany/Italy	130.0	0.0	1	0.1
Germany/Norway	18.0	0.0	1	0.1
Germany/Soviet Union	80.0	0.0	1	0.1
Germany/United States	80.0	0.0	1	0.1
Germany/multiple	40.0	0.0	1	0.1
Holland	45.0	0.0	1	0.1
Italy	230.5	109.2	4	0.3
Italy/Soviet Union	140.0	0.0	1	0.1
Italy/multiple	271.0	100.2	4	0.3
Japan	159.0	0.0	1	0.1

Appendix P (cont)

multiple countries	200.9	130.7	324	27.4
Netherlands/Soviet	53.0	0.0	1	0.1
Netherlands/multiple	248.0	0.0	1	0.1
Norway/Sweden	53.0	0.0	1	0.1
Norway/United States	333.0	0.0	1	0.1
Norway/West Germany	73.0	55.1	2	0.2
Norway/multiple	130.6	81.3	11	0.9
not applicable	165.3	83.1	11	0.9
Puerto Rico/multiple	236.0	0.0	1	0.1
Poland	190.0	107.6	3	0.3
Poland/United States	55.0	0.0	1	0.1
Romania	113.6	74.0	3	0.3
Romania/Sweden	45.0	0.0	1	0.1
Romania/United States	40.0	0.0	1	0.1
Soviet Union	114.2	129.0	4	0.3
Soviet Union/Sweden	140.7	114.4	4	0.3
Soviet Union/U.S.A.	100.5	89.4	4	0.3
Soviet Union/W.G.	139.0	0.0	1	0.1
Soviet Union/multiple	197.0	96.2	11	0.9
Sweden	35.0	0.0	1	0.1
Sweden/Switzerland	130.0	21.2	2	0.2
Sweden/United Kingdom	15.0	0.0	1	0.1
Sweden/United States	111.6	93.1	6	0.5

Appendix P (cont)

Sweden/multiple	134.8	104.5	5	0.4
Switzerland	265.0	0.0	1	0.1
Switzerland/multiple	237.0	26.8	2	0.2
United Kingdom	67.5	42.8	7	0.6
United Kingdom/multi	116.4	39.9	5	0.4
United States	179.1	160.4	41	3.5
United States/Germany	60.0	0.0	1	0.1
United States/W.G.	93.5	20.5	2	0.2
United States/multiple	211.1	95.0	24	2.0
West Germany	58.0	0.0	1	0.1
West Germany/multiple	329.0	0.0	1	0.1
Yugoslavia	184.3	98.2	3	0.3
Yugoslavia/multiple	154.5	143.5	2	0.2
Total	184.7	122.6	1184	100.0

Appendix Q

The Mean Size and Frequency of Pictorials According to Affiliation

Affiliation	Size in cm ²	Pictorials		
		Standard Deviation	Number	%
Austria	195.7	136.4	10	1.9
Austria/Soviet Union	430.0	0.0	1	0.2
C.I.S.	80.0	0.0	1	0.2
Canada	120.3	119.5	284	53.8
Canada/Austria	241.0	115.4	3	0.6
Canada/C.I.S.	286.5	12.0	2	0.4
Canada/Czechoslovakia	275.3	159.2	3	0.6
Canada/East Germany	268.5	6.3	2	0.4
Canada/Finland	340.5	6.3	2	0.4
Canada/Germany	266.0	0.0	1	0.2
Canada/Norway	302.5	2.1	2	0.4
Canada/Soviet Union	213.1	90.9	7	1.3
Canada/Sweden	232.0	58.1	4	0.8
Canada/Switzerland	242.2	51.9	4	0.8
Canada/United States	273.9	113.2	11	2.1
Canada/West Germany	271.2	211.0	4	0.8
Chile	398.0	0.0	1	0.2
Czechoslovakia/Soviet	243.0	44.9	3	0.6

Appendix Q (cont)

Czechoslovakia/U.S.A.	301.0	0.0	1	0.2
Czechoslovakia/W.Germany	264.0	0.0	1	0.2
East Germany	174.6	113.6	8	1.5
East Germany/Soviet	210.0	0.0	1	0.2
Finland	232.6	93.5	10	1.9
Finland/Poland	240.0	0.0	1	0.2
Finland/United States	429.0	0.0	1	0.2
France	253.1	210.3	9	1.7
France/United Kingdom	98.0	0.0	10	0.2
Germany	167.3	87.6	3	0.6
Italy	177.9	87.0	11	2.1
Japan	239.3	161.2	3	0.6
Netherlands	118.6	68.4	5	0.9
Norway	121.7	58.0	7	1.3
Poland	33.0	0.0	1	0.2
Romania	288.0	0.0	1	0.2
Senegal	73.0	0.0	1	0.2
Soviet Union	177.1	146.2	15	2.5
Soviet Union/United States	339.5	366.9	2	0.4
Soviet Union/multiple	307.0	0.0	1	0.2
Spain	168.0	0.0	1	0.2
Sweden	257.0	250.9	4	0.8
Switzerland	190.1	102.0	12	2.3

Appendix Q (cont)

Switzerland/United States	168.0	0.0	1	0.2
United Kingdom	162.4	137.1	11	2.1
United States	190.2	130.5	46	8.7
United States W. Germany	332.0	0.0	1	0.2
W. Germany	293.0	102.2	3	0.6
multiple	263.8	124.0	12	2.3
not applicable	190.2	107.7	9	1.7
Total	162.7	131.6	528	100.0
