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An Analysis of *Sports Illustrated* Feature Articles, 1954–1987

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All *Sports Illustrated* feature articles between 1954–1987 were examined with reference to sport, gender, race, role of the person featured, length of article, author, number of pictures, individuals pictured, and descriptive characteristics. The sporting achievements and lives of males were acclaimed in 90.8% of these 3,723 articles. Males authored 91.8% of the articles. Baseball (21.6%), football (16.2%), and basketball (13.1%) appeared most frequently, followed by boxing (7.5%), track and field (6.5%), and golf (4.7%). Blacks were featured in only 22.4% of the feature articles. Athletes (83.9%) and their achievements, rather than coaches, owners, or administrators, were the focus of these articles. As expected, pictures of the featured individuals predominated (mean of 3.01) over those of others (mean of .677). Articles about males and whites were longer on average than those about females and blacks (66 to 55 and 67 to 58 column inches, respectively), as were those for boxing (77), football (69), baseball (60), and men's basketball (58). Written descriptors characterized females in blatantly sexist terms.

Sports Illustrated, the most widely read sports magazine in the United States, reflects the status and popularity of American sport. Editorial decisions concerning which individuals to highlight in feature articles reflect judgments about who and what the readership wants. Additionally, this publication may help to shape attitudes toward certain athletes and sports figures through its journalistic interpretations of their lives and achievements. Since the majority of *Sports Illustrated* readers are white and male, it is appropriate to initially consider race and gender descriptors.

Concerning race, many sociologists have pointed to the unequal treatment of blacks in supposedly desegregated sports (Berghorn, Yetman, & Hanna, 1988; Edwards, 1969; Lapchick, 1984; Loy & McElvogue, 1970; McPherson, 1976; Yetman & Eitzen, 1972). The media may have perpetuated discriminatory treatment in the form of quota systems, stacking, lower salaries, limited opportunities for appearance, endorsement and sponsorship income, and limited opportunities for advancement into management positions (Edwards, 1985).

In an analysis of the number of black and white athletes featured in a sample of issues of *Sports Illustrated* drawn at 7-year intervals, Anderson and Condor

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(1986) found that white athletes were portrayed more often and in longer articles than black athletes in 1960, 1967, and 1974. Only in basketball, boxing, and track and field were black athletes given equal or greater coverage than white athletes in each year studied. For 1985, Anderson and Condor reported an increase in the coverage of white baseball and football athletes, while there were no changes in the feature articles about black athletes. Leath and Lumpkin (1990) found that only 12 black women (4 of these were in track and field and 5 in basketball) appeared on the 151 covers of *Women's Sport and Fitness* magazine. Only 25 of the 290 feature articles highlighted the sports achievements of black women.

Given the large percentages of black athletes in professional baseball (21%), basketball (73%), and football (57%) (Coakley, 1990), there are surprisingly few media analyses of black athletes, and it would appear that a comprehensive examination of how the media have treated black athletes is needed.

Concerning gender, sportswomen were more anomalies than equal partners in the world of sport when *Sports Illustrated* published its first issue in 1954. Almost 20 years later in this magazine, Gilbert and Williamson (1973) recounted numerous illustrations of the unequal treatment of women in sport. Others agree that women have not achieved sports equality in media coverage (Boutilier & San Giovanni, 1983; Coakley, 1990; Felshin, 1974; Geadelmann, Grant, Slatton, & Burke, 1977; Howell, 1982; Kane, 1988; Lapchick, 1986; Oglesby, 1978).

Hilliard (1984) found that male and female professional tennis players were characterized quite differently in mass circulation magazine articles, and that the characterizations tended to support stereotypical gender roles. Felshin (1974) noted that female athletes received limited coverage and that their sports activities have been trivialized and often used to confirm sex-role stereotypes. Boutilier and San Giovanni (1983) argued that newspaper, magazine, and television coverage of women's sports confirmed a traditionally feminine image with emphasis placed on their participation in "sex appropriate" sports, such as tennis and figure skating.

With increasing female participation in sports during the 1970s and 1980s, it might have been expected that the coverage of sportswomen would have changed from that described by Felshin and by Boutilier and San Giovanni. Yet Poe (1976), in a comparison of magazine advertising portraying women in sports in 1928, 1956, and 1972, found that those in 1928 were both more numerous and more varied and that stereotypical portrayals increased in 1956 and 1972. An analysis revealed that (a) women were shown in recreational rather than competitive situations; (b) women were featured in individual and dual activities generally associated with the upper classes; and (c) sport for women appeared to be more of a sexual than an athletic activity (for example, women posed near pools in swimming suits).

In an investigation of the availability of female athletic role models in *Young Athlete*, a magazine marketed to 12- to 22-year-olds, Rintala and Birrell (1984) concluded that females continued to be underrepresented and portrayed in traditional roles. They advocated that fair treatment of women's sports should reflect women's actual involvement rates. Disproportionately more coverage was given males in recreational sports. Females were seldom shown in team sports such as field hockey, softball, and volleyball, even though they are highly involved in these sports. Males were more frequently photographed, depicted in

more active and competitive poses, and featured on the covers even though 40–50% of the readers were estimated to be females. *Young Athlete* failed to dispel the image that American sport was synonymous with male athletics, especially the big three professional team sports.

Hilliard's (1984) study also supported Boutilier and San Giovanni's assertion that sportswriting has traditionally been a male-dominated occupation. Female reporters typically wrote only about female athletes.

Analyses of the coverage of women athletes in *Sports Illustrated*, the leading sports magazine because of its comprehensive coverage of all sports and its extensive circulation, have confirmed a bias against women in sport. Reid and Soley (1979) studied 72 issues of this magazine, looking at the feature articles in the first issue of each month in the Olympic years between 1956–1976. They reported that the percentage of articles about women did not change significantly during this time period. Bryant (1980) analyzed female representation in *Runner's World, Sport, Sports Illustrated,* and *Tennis* in 1979 and 1980. He reported that female athletes received only 17% of the coverage while males received 83%.

Kane (1988, 1989) examined women in *Sports Illustrated* feature articles between 1964 and 1987, comparing the number of articles written about women in light of the impact of Title IX. She reported a significant increase in the number of articles featuring athletic women (compared to the nonathlete, such as the swimsuit model). Regardless of time period, however, women in "sex appropriate" sports were featured significantly more often than female athletes in "sex inappropriate" sports.

This study extends the current literature, and especially the dearth of analyses of black athletes in the media, by (a) providing a comprehensive data set to test previous findings, and (b) considering race/gender interaction. All feature articles in *Sports Illustrated* between 1954–1987 were examined in order to answer the following questions:

1. Does the publication reinforce traditional attitudes toward females in sport by limiting the number and length of articles and by acclaiming their achievements primarily in "sex appropriate" sports (namely, individual/dual sports viewed as aesthetically acceptable and feminine)?
2. Do the number and length of feature articles disproportionately acknowledge the achievements of white athletes compared to black athletes in the most popular male sports?
3. Is there differential treatment by gender and race in 10 selected sports played by both males and females?
4. Do male authors characterize males and females in different and stereotypical ways?
5. Were males or females and blacks or whites in certain sports featured in more and/or longer articles?

Methods

Each of 3,723 feature articles in *Sports Illustrated* between 1954–1987 was read and analyzed. A feature article was operationally defined as a story about athletes, coaches, owners, or other significant sporting persons. Each individual was the subject of a personal profile rather than simply being acclaimed for

winning a recent competition. Descriptive statistics were generated for the authors, gender, race, sports, and roles of the persons featured, the number of pictures and the number of persons in the pictures, and the length (in column inches) of all feature articles. An initial analysis examined these variables for the predominantly male sports of baseball, basketball, boxing, and football. Basketball, cycling, diving, golf, gymnastics, ice skating, snow skiing, swimming, tennis, and track and field were chosen for examination as the 10 most popular sports for both females and males. Personal trait descriptors by gender were extracted from the feature articles. That is, when reading each feature article, we noted words—other than general terms about height, weight, or hair color or style—that depicted the individual in possibly demeaning or sexist ways. Only those considered most overt were reported.

Results

For the 34 years studied, there were on average 1.9 feature articles per issue (the maximum in an issue was 9). The mean length of a feature article was 64.5 column inches. Males (91.8%) authored most of the feature articles, with 3% of these being autobiographical (see Table 1). Some 90.8% of the articles featured males and 8% featured females, while an additional 40 articles (1.1%) highlighted the achievements of individuals of both sexes (see Table 2). Blacks,

Table 1

Authors of Feature Articles

Authors	Frequency	Percent
Males	3068	88.8
Females	157	4.5
Unknown	117	3.4
Self males	103	3.0
Self females	1	.1

Table 2

Genders of Persons Featured

Gender	Frequency	Percent
Males	3178	90.8
Females	280	8.0
Both	40	1.1

even though their presence in sports was prevalent and in some cases predominant, were featured in less than a quarter of the articles, 22.4%, while white athletes received the most coverage, 76.1% (see Table 3).

Baseball players were the most common subjects of feature articles (21.6% of the total), followed by football players (16.2%), basketball players (13.1%), boxers (7.5%), track and field athletes (6.5%), golfers (4.7%), ice hockey players (4.6%), tennis players (4.0%), and those involved in horse racing (3.1%) (see Table 4). Athletes were the subject of 83.9% of the feature articles. Table 5 shows the distribution of coverage of other sports roles, such as coaches, owners, and officials. It is interesting that 15.2% of the featured individuals were not athletes but were viewed as important enough to their sports by the editors of *Sports Illustrated* to be highlighted. Almost all of these were white males.

Feature articles included 0–10 pictures of the highlighted person, with an average of 3.01 (see Table 6). Some 27% of these articles also included pictures of others, such as family members or teammates. Feature articles on whites in baseball, basketball, boxing, and football were longer (mean = 67 column inches) than were those of blacks (mean = 58.2) (see Table 7). In these sports, individuals in boxing received the longest coverage (mean = 77 column inches), followed by football (69), baseball (60), and basketball (58). The rank order for number of photographs of the featured person was boxing (3.5), football (3.2), basketball (2.7), and baseball (2.5).

A three-way analysis was employed to examine gender by race for 10 sports.[1] Males in these sports received more extensive coverage (mean = 65.6 column inches for males vs. 54.8 for females), while females were pictured slightly more often (mean = 3.2 for females to 3.0 for males) (see Table 8). Articles about whites were longer (66 column inches vs. 61 for blacks) and included more pictures (3.1) than those on blacks (2.8). As might be expected, articles about white males were longest (68.5 column inches), followed by those on black males (61), white females (56), and black females (42). White females were pictured the most (mean = 3.3) and black females the least (mean = 2.7). A ranking of the 10 most popular sports for both sexes revealed that articles about individuals associated with track and field led in column inches, followed by diving, tennis, cycling, golf, swimming, ice skating, basketball, skiing, and gymnastics. The top five of these sports in the number of photographs of the featured person were ice skating, gymnastics, diving, skiing, and track and field.

The gender-by-sport analysis showed that females in tennis (63 column inches), swimming (61), diving (60.7), cycling (59), and track and field (58) received the most extensive coverage (see Table 9). A single article about a male

[1]The sports of basketball, cycling, diving, golf, gymnastics, ice skating, skiing (downhill), swimming, tennis, and track and field were selected because both sexes participated in them. The greatest number of articles were written about individuals in these sports, with the exception of cycling, if predominately male sports such as horse racing were omitted.

Table 3

Races of Persons Featured

Races	Frequency	Percent
Whites—U.S.	2274	65.0
Blacks—U.S.	741	21.2
Whites—non-U.S.	387	11.1
Blacks—non-U.S.	42	1.2
Whites and blacks	37	1.1
*Unknown	18	0.5

*Defined as an individual who could not be positively identified in a picture or in the text as white or black.

Table 4

Sports of Persons Featured

Sports	Frequency	Percent
Baseball	755	21.6
Football	568	16.2
Basketball	459	13.1
Boxing	262	7.5
Track & field	228	6.5
Golf	166	4.7
Ice hockey	161	4.6
Tennis	140	4.0
Horse racing	110	3.1
Auto racing	74	2.1
Swimming	67	1.9
Skiing	32	0.9
Soccer	31	0.9
Bowling	21	0.6
Wrestling	19	0.5
Harness racing	18	0.5
Figure skating	16	0.5
Gymnastics	13	0.4
Diving	12	0.3
Weight lifting	11	0.3

Table 5

Status of Persons Featured

Status	Frequency	Percent
Athletes	2717	77.9
Coaches / managers	291	8.3
Athletes (2 or more)	192	5.5
Owners	127	3.6
Business persons (nonowner)	53	1.5
Media persons	42	1.2
Judges / referees / umpires	20	0.6
Athletes / coaches	18	0.5

Table 6a

Number of Pictures of Self in Feature Articles

Number	Frequency	Percent
0	98	2.9
1	1216	35.4
2	647	18.8
3	425	12.4
4	321	9.4
5	250	7.3
6	139	4.0
7	96	2.8
8	63	1.8
9	43	1.3
10	42	1.2

Mean = 3.01.

figure skater was the longest (123 column inches) for males, followed by diving (79), track and field (77), tennis (72.7), and golf (67.7). Among these 10 selected sports, photographs of featured females were most prevalent in gymnastics (4.5), cycling (4), and tennis (3.6). For males, ice skating (11) led diving (4.6) and skiing (3.7).

Only 6 of the 10 selected sports featured blacks (see Table 10). Track and field (77 column inches), golf (75), and tennis (61) led in print coverage. Whites

Table 6b

Number of Pictures of Others in Feature Articles

Number	Frequency	Percent
0	2486	72.4
1	474	13.8
2	190	5.5
3	99	2.9
4	65	1.9
5	38	1.1

Mean = .677.

Table 7

Article Length and Number of Photographs by Race in Four Male Sports

	Total no. of feature articles	Avg. length in column inches
Column inches		
Whites	1192	67.269
Blacks	648	58.207
Boxing	205	77.048
Football	536	68.960
Baseball	670	60.236
Basketball	429	57.779
	Total no. of photographs	**Avg. no. of photographs per article**
Photographs of featured persons		
Whites	1186	2.9056
Blacks	644	2.8929
Boxing	202	3.5050
Football	534	3.2453
Basketball	427	2.7307
Baseball	667	2.5517

Table 8

Article Length and Number of Photographs by Gender, Race, and Sport

	Column inches		Photographs of featured person	
	Total no.	Avg. no.	Total no.	Avg. no.
Gender				
Male	845	65.621	842	2.97
Female	141	54.801	139	3.24
Race				
White	623	66.082	619	3.14
Black	363	60.626	362	2.80
Gender/race				
Female/black	16	42.45	16	2.69
Female/white	125	56.38	123	3.31
Male/black	347	61.46	346	2.81
Male/white	498	68.52	496	3.10
Sports				
Basketball	427	57.96	425	2.72
Cycling	7	64.75	7	2.57
Diving	11	69.14	11	3.82
Golf	145	63.32	146	3.00
Gymnastics	8	49.78	8	4.00
Ice skating	10	58.47	10	5.60
Skiing	20	54.69	19	3.58
Swimming	55	61.70	53	2.66
Tennis	98	69.04	100	2.95
Track & field	205	77.05	202	3.51

Table 9

Coverage by Gender in 10 Selected Sports

Sports	No. of articles		Column inches		No. of photographs	
	M	F	M	F	M	F
Basketball	408	19	58.32	50.32	2.74	2.42
Cycling	5	2	66.85	59.50	2.00	4.00
Diving	5	6	79.25	60.70	4.60	3.16
Golf	113	32	67.67	47.95	3.05	2.81
Gymnastics	2	6	52.38	48.92	2.50	4.50
Ice skating	1	9	123.00	51.31	11.00	5.00
Skiing	13	7	65.54	34.54	3.70	3.33
Swimming	34	21	61.35	62.26	2.64	2.70
Tennis	61	37	72.68	63.04	2.54	3.65
Track & field	203	2	77.24	58.00	3.51	3.50

Table 10

Coverage by Race in 10 Selected Sports

Sports	No. of articles		Column inches		No. of photographs	
	Blacks	Whites	Blacks	Whites	Blacks	Whites
Basketball	218	209	50.53	65.72	2.53	2.93
Cycling	1	6	43.50	68.29	–	3.00
Diving	–	11	–	69.14	—	3.82
Golf	5	140	75.20	62.89	4.00	2.96
Gymnastics	–	8	–	49.78	–	4.00
Ice skating	2	8	50.25	60.53	5.00	5.75
Skiing	–	20	–	54.69	–	3.58
Swimming	–	55	–	61.70	–	2.66
Tennis	7	91	61.36	69.63	1.43	3.06
Track & field	130	75	77.25	76.70	3.29	3.87

Table 11

Coverage by Gender, Race, and Sport in 10 Selected Sports

Sports	Females & blacks	Females & whites	Males & blacks	Males & whites
No. of articles				
Basketball	9	10	209	199
Cycling	–	2	1	4
Diving	–	6	–	5
Golf	–	32	5	108
Gymnastics	–	6	–	2
Ice skating	2	7	–	1
Skiing	–	7	–	13
Swimming	–	21	–	34
Tennis	4	31	3	58
Track & field	1	1	129	74
Column inches				
Basketball	41.89	57.95	50.90	60.11
Cycling	–	59.50	43.50	72.69
Diving	–	60.71	–	79.25
Golf	–	47.95	75.20	67.32
Gymnastics	–	48.92	–	53.38
Ice skating	50.25	51.61	–	123.00
Skiing	–	34.54	–	65.54
Swimming	–	62.26	–	61.35
Tennis	36.69	66.23	94.25	71.56
Track & field	55.00	61.00	77.42	76.91

in track and field (76.7 column inches), tennis (69.6), diving (69), cycling (68), and basketball (65) were highlighted in the longest feature articles.

The two articles on blacks in ice skating included an average of five photographs of the person featured. Pictures of black track and field athletes ranked second with three. Ice skating (5), gymnastics (4), track and field (3.9), diving (3.8), and skiing (3.6) were the leaders in the number of photographs of whites in feature articles.

The three-way analysis (see Table 11) revealed that the top six sports featuring white females were tennis (66 column inches), followed by swimming (62), track and field (61), diving (60), cycling (59.5), and basketball (57.9). White females in these sports received greater coverage than black females in track and field (55); yet this was the sport of the longest articles on black females. Feature stories about ice skating contained the highest number of photographs (5) of both black and female athletes. Gymnastics (4.5) ranked second in the number of photographs for white sportswomen; black females in track and field and white females in cycling ranked third in number of photographs per article (4).

A single article on a white male ice skater (123 column inches) surpassed the average length of all other feature articles about males. The highest average length of articles on black males occurred in tennis (94) in three features. The next longest articles featured white males in diving (79), black males (77) and white males (76.9) in track and field, and black males in golf (75). The highest number of featured person photographs were found in articles about the white males in ice skating (11), diving (4.6), and track and field (3.9), and about black males in golf (4) and track and field (3).

The selected descriptors of females in Table 12 dramatically reaffirmed that predominately male authors often characterized sportswomen in blatantly sexist terms. Examples included "luscious," "beautiful face with a beautiful body," "12-car pileup gorgeous," "about the sexiest thing I'd ever seen," and "the tour's resident sex goddess." In contrast, males were most often described as having "All-American features," "a magnificent physique," and "a well-proportioned body" (see Table 13).

Discussion

Overall, the findings of this study expand on how the media depicts blacks and women in sport. *Sports Illustrated* reinforces traditional attitudes toward females in sport in two ways. First, it provides only a limited number of articles about female athletes, and these are shorter than those featuring males. There were fewer black than white female athletes featured in articles. *Sports Illustrated*'s choice of individuals to feature in personal profiles may reflect the interests of a primarily male readership. Male authors write mostly about males. This confirms the findings of Anderson and Condor (1986), Kane (1988), and Reid and Soley (1979). Second, females in tennis, golf, and swimming are featured most often.

Similarly, white females in tennis, swimming, and diving are highlighted in the longest articles. Kane (1988) also reported that more articles were written about females in these "sex appropriate" sports. Interestingly, white females were pictured more frequently than were white males. Since these photographs

Table 12

Selected Descriptors of Females

Sport	Year	Athlete	Descriptors
Gymnastics	1954	Paula Jean Myers*	Pretty, graceful, smooth-muscled beauty; perfect 34" figure
Equestrian	1954	Josephine Abercrombie	Pretty blue-eyed blonde; handsomely configured
Bowling	1955	Marion Ladewig*	Fierce competitor, yet charmingly feminine
Tennis	1955	Beverly Baker Fleitz	Lissome; a figure to watch; easily the prettiest
Equestrian (owner)	1958	Liz Lunn*	One of Philadelphia's unforgettable beauties
Swimming	1958	Chris Von Saltza*	Pretty blonde lass
Swimming	1959	Esther Williams	Beautiful face with beautiful body; 38-25-35
Gymnastics	1960	Ernestine Russell*	Luscious; prettiest; becomingly distributed weight; 35-24-34, slender; graceful; trim; nicest legs in sports
Tennis	1960	Maria Bueno*	Dark Latin looks; British opponent called an "amazon"
Swimming	1962	Donna deVarona	Tough muscles on an otherwise lady-like figure
Snow skiing	1964	Jean Saubert*	Winsome; cute; sparkling blue eyes; pink cheeks
Golf	1968	Carol Mann*	Effervescent blonde; fine sense of femininity in clothes (not always easy to find on the women's tour)
Snow skiing	1969	Annie Famose*	Cute; "catch me, kiss me haircut"; walk of a lady panther

Sports Illustrated, August 23, 1971
"A cool, braided California blonde named Laura Baugh made quite a splash. . . . her perfectly tanned, well-formed legs swinging jauntily. The hair on her tapered arms was bleached absolutely white against a milk-chocolate tan. Her platinum hair was pulled smartly back in a Viking-maiden braid." The account had to do with a women's golf tournament. The difference in reporting men's and women's sporting events is obvious.

Bowling	1972	Paula Sperber*	Somewhat of a doll; leggy; wears hot pants and mini-skirts; 35-25-36-1/2
Horseracing	1972	Robyn Smith*	Lovely; knockout face and figure; long lovely legs
Figure skating	1973	Janet Lynn Nowicki*	Very short; dumpling; features like a Slavic angel
Basketball	1974	Hazel Walker*	"About the sexiest thing I'd ever seen"
Golf	1976	Jan Stephenson*	Better known for her looks; she's pretty, but can she win? movie-star smile

(cont.)

Table 12 (cont.)

Sport	Year	Athlete	Descriptors
Golf	1977	Nancy Lopez*	Dark-eyed beauty
Golf	1977	Jan Stephenson*	Tour's resident sex goddess
Ice skating	1980	Tai Babilonia*	Tawny in color as a lioness; almost finished woman of full bosom
Snow skiing	1980	Anna Marie Moser-Proll	More or less solid block from her shoulder down to the awesome bulges of her buttocks and thighs; there isn't more than a hint of a graceful curve anywhere
Running & body building	1981	Gayle Olinek*	Greatest legs to ever stride the earth
Golf	1982	Jan Stephenson*	More than a pretty face; good looks; truly striking
Basketball	1982	Paula & Pam McGee*	Beautiful women; exquisitely proportioned pounds
Tennis	1982	Barbara Potter	Skin has the pale perfection of the beauties
Basketball	1984	Lynette Woodard	Muscles and curves
Tennis	1985	Hana Mandlikova	Beautiful legs
Track & field	1985	Valerie Brisco-Hooks*	Athletic fashion plate

Sports Illustrated, January 20, 1986
"Other than that, it was a slow day for eroding the moral fiber 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."

*Male author

most frequently pictured females in "sex appropriate" sports, an accentuation on the traditional definition of femininity may have been subtly reinforced.

In features on athletes in the most popular male sports, the findings suggest that *Sports Illustrated* disproportionately publicizes the sports achievements of whites when compared to those of blacks. This confirms the findings of Anderson and Condor (1986). The coverage accorded to blacks (almost all athletes, since few blacks are owners, coaches, officials, or administrators) is not proportional with their presence in many sports. Given the predominance of articles about males in the three professional team sports, the limited number of articles about black athletes supports previous concerns about discriminatory treatment (Berghorn et al., 1988; Edwards, 1969).

Individuals in baseball, basketball, and football, along with those in boxing, receive the greatest coverage due probably to media exposure and prolonged, well-established professional seasons and championships. Although in recent years almost as many black as white male athletes have achieved stardom or performed at the highest levels, writers devoted more column inches to whites.

Table 13

Selected Descriptors of Males

Sport	Year	Athlete	Descriptors
Golf	1955	Jack Fleck	Best looking champion
Track	1957	Bobby Joe Morrow*	Beau idol; good looking
Football	1958	Billy Cannon*	Magnificent physique; good looking
Snow skiing	1960	Toni Sailer*	Extraordinarily good looking
Golf	1964	Ken Venturi*	Handsome
Auto racing	1968	Cale Yarborough*	Absolute beauty; blond with deep dark brown eyes
Tennis	1974	John Newcombe*	Grown into handsomeness; mustached; rugged, sexy face
Basketball	1977	Ricky Barry*	Slim; soft hair, wide doe eyes
Drag racing	1979	Don Garlits*	Handsome; all-American face
Football	1979	Charles White*	Extraordinarily handsome; chiseled features; awesome
Tennis	1980	Vincent Van Patten*	All-American boy features; cherub face; Pepsodent smile
Golf	1980	Tom Watson*	Handsome; back layered with muscle; strong legs
Football	1981	Brian Sipe*	Boyish good looks; an ideal Midwestern sex symbol
Swimming	1983	Steve Lundquist*	Swimming's #1 sex symbol
Soccer	1985	Ricky Davis*	Wholesome good looks; pin-up boy of soccer
Cycling	1985	Frank L. Kramer*	Handsome; beautiful legs; well-proportioned body

*Male author

Also, marketing to a mostly white audience may have influenced why blacks were written about less frequently, in shorter articles, and with fewer pictures. This is further supported by the lower figures (in column inches and photographs) for featured persons in basketball, a sport associated primarily with blacks at the elite levels.

In the 10 selected sports, male, female, black, and white athletes received quite differential treatment. White males in golf, basketball, skiing, swimming, tennis, and track and field had dramatically more and longer feature articles written about them than did white females. Black females were only featured in four of these sports, and then in only 16 articles out of the 3,723 examined. Leath and Lumpkin (1990) reported similar limited coverage of black females in *Women's Sports and Fitness*.

Even though females now participate more frequently, and especially in these 10 selected sports, based on this publication's selection of people to feature, sports are still viewed as primarily for males. This was supported by the finding that black and white males were featured in longer articles. With the additional variable of race, tennis and swimming for whites and basketball and track and

field for blacks may have reinforced traditional stereotypes of "race appropriate" sports for females. The limited coverage accorded to black female athletes appears to reflect both a gender and a racial bias.

The second most frequent sport (after basketball) of the 10 selected sports in which black males were featured was track and field, both in number of articles and in length. Black males were only written about in three other sports. Such features reconfirm socioeconomic opportunities by race. That is, blacks predominate in school-sponsored sports and not in the sports that often require country club membership and private lessons.

Sports Illustrated articles typically characterize the featured individual quite differently. The selected descriptors of females in feature articles reveals that sexist language, such as body dimensions and references to attractiveness, is indeed evident in the stories written by males. A comparison of the descriptors by gender dramatically illustrates that looking pretty or dressing or behaving in traditionally feminine ways seems to be as important as athletic prowess to *Sports Illustrated*'s authors and editors. Bodily references to males seldom refer to anything other than good looks or well-developed physiques. It is interesting to note that the three most recent descriptors of male athletes listed include "sex symbol" references. Rather than being a shift in emphasis away from the rugged masculinity associated with athletes, the sports of these stars should be noted, that is, swimming, soccer, and cycling. Also, many of the articles about males contain sexist innuendos about their wives.

White males are featured more frequently and in longer articles. *Sports Illustrated* reinforces traditional attitudes toward females in sport by providing limited numbers and shorter lengths of feature articles primarily in "sex appropriate" sports. The fact that women are pictured more often than men may trivialize their sports achievements while emphasizing their physical traits. Although females now have more sports opportunities, the limited number of sportswomen is reflected in the smaller proportion of articles in which they are featured. Appealing to a dominant male readership who prefer to focus on the leading men's professional sports also contributes to the inequitable treatment accorded females.

This publication's focus on whites in its feature articles suggests that blacks' achievements are viewed as less significant. Again, marketing primarily to a white audience may result in the magazine overlooking some noteworthy black athletes. Since few blacks excel in sports other than baseball, basketball, boxing, football, and track and field, the likelihood of their being featured lessens.

Conclusion

Sport Illustrated editors, in their selection of individuals to feature, probably reflect cultural biases more than a deliberate policy to discriminate. Still, as predicted, the ranking of the number and length of articles places white males highest, with large gaps between them and each of the subsequent groups of black males, white females, and black females. Thus, it is concluded that *Sports Illustrated* perpetuates and reinforces traditional images and stereotypes of blacks and women in sport.

1. Fast—that is, exceptionally fast healer defined as recovering in 5 weeks or less;
2. Average—defined as recovering in over 5 weeks but less than 12 weeks;
3. Slow—defined as recovery taking over 12 weeks.

The percentage of exceptional recoveries in this study, 19%, corresponds to that found in the literature of exceptional recoveries in cancer patients: 15–20% (Achterberg et al., 1977; Siegel, 1986).

Statistical Analysis. The major variables analyzed against the dependent variable, recovery time, were calculated as follows: (a) Attitude (total derived from three questions each on a 0–10 scale, with 0 denoting not at all important and 10 denoting extremely important): feelings about the importance of their sport to them, feelings about how disruptive the injury had been, and their determination to return to sport as soon as possible. (b) Outlook (total derived from four questions on a −5 to +5 scale): outlook initially (at the time of the injury), when athlete visited the sports medicine specialist, midway through physiotherapy, and toward the end of rehabilitation. (c) Stress (total derived from the difference between two questions on a 0–10 scale): difference between perceived control over stress and level of stress. (d) Social support (0–10): As the verbal responses indicated a widely varying interpretation or confusion about the meaning of social support, it was not used in the whole regression model. (e) Positive self-talk: frequency of self-talk reported on a 0–10 scale multiplied by the proportion of positive self-talk to negative self-talk expressed in percentage (i.e., percent positive/percent negative, e.g., 8 × 80% if reported 80/20). (f) Goal setting (total derived from three questions on a 0–10 scale): the extent to which subjects set daily and long-term goals for recovery, and returning to sport goals. (g) Imagery: extent of healing imagery rated on a 0–10 scale.

Tables 2 and 3 display the means, standard deviations, and correlation results using all the data (Table 2), and the fast versus slow comparison (Table 3), for each of the above variables tested against recovery time. Table 3 also displays the *t* test results comparing the means between the fast and slow healers. The

Table 2

Means, Standard Deviations, and Healing Variable-Recovery Time Correlations for all Data

Variable	*M*	*SD*	*r*
Positive self-talk	4.0	4.0	−.394**
Goal setting	17.4	10.1	−.310*
Healing imagery	2.6	3.5	−.228
Outlook	10.5	7.7	−.214
Stress	1.1	4.1	−.095
Support	7.9	2.2	.045
Attitude	23.3	4.1	−.045

*$p<.10$; **$p<.05$; ***$p<.01$.

Table 3

Means, Standard Deviations, *t* tests, and Healing Variable-Recovery Time Correlations for all Data

Variable	*M*		*SD*		*r*	*t*
	Fast	Slow	Fast	Slow		
Goal setting	27.2	14.8	2.0	7.1	−.864***	6.41**
Pos. self-talk	8.7	2.7	3.6	3.6	−.668***	3.24**
Healing imagery	5.3	2.2	4.9	3.0	−.407*	1.67
Outlook	12.3	7.6	8.3	8.3	−.130	0.49
Attitude	27.4	24.3	1.8	1.8	−.084	0.32
Support	8.0	8.1	2.1	2.3	.032	0.10
Stress	2.0	0.7	4.3	4.6	.000	0.00

*$p<.10$; **$p<.05$; ***$p<.01$.

variables were ranked according to their level of significance and size of correlation. As can be seen in Tables 2 and 3, goal setting, positive self-talk, and healing imagery were the top three variables for both data sets, and elimination of the middle (average recovery time) group led to more dramatic results.

The top three variables associated with fastest recovery were goal setting, positive self-talk, and imagery (see Tables 2 and 3). This was of great interest to us, as these factors are commonly used for performance enhancement in applied sport psychology. Of all the variables tested, these are also most amenable to change in that they comprise activities and skills that can be taught and learned. That is, they are more within a person's potential control than the other variables studied.

Although the remaining variables of positive attitude and outlook and low level of stress did not produce significant results, they nevertheless corroborate the hypothesized trend of their contributing to faster recovery time. For future studies, the questions used to "tap" the variables stress and social support require greater precision and clarity of estimation, as verbal responses from subjects in this study indicated varying perceptions of these factors and how to rate them.

A question was included in the survey regarding the extent to which subjects felt they could accurately recall their rehabilitation experience. It resulted in an average recall score of 8 on a scale from 0 to 10. In studies such as this there is also a possibility of response bias according to the outcome of the rehabilitation, that is, a subject who recovered quickly may have good reason to feel relatively positive about the experience and consequently will provide a more positive report; likewise for the slower healers—their "selective memories" may reflect the outcome rather than their true experience. Future researchers should consider conducting a survey at some point *during* the recovery process to eliminate the possibility of such bias. It is interesting to note, however, that when subjects were questioned about their perceived rate of recovery ("How do

you feel about your rate of recovery?" [0–10, 0 = very slow; 10 = very fast; 5 = about average]), no significant correlation was found between perceived and actual time of recovery.

Qualitative Results

This section presents and discusses the results from the qualitative data that were derived from the written verbal responses to open-ended questions in the survey. In most cases these questions permitted subjects to verify or elaborate on numerical ratings, or allowed an opportunity for responses to relevant questions about healing.

Differences were found between the verbal responses of those who had exceptional recoveries (fast group) and those who were slow, which support and add to the quantitative findings of this study. They will be presented in the order in which they appear in the survey. As with the numerical data, there was much greater consistency in the answers within both extreme groups than in the middle group, which evidenced much greater variability.

Generally, the fast healers' responses were consistently positive to all the questions and were more elaborate as well. The average group contained a mixture of positive and negative responses, and the slow healing group tended to be mostly negative in their responses. Positive is defined as a statement reflecting a positive attitude and optimism, that is, focused on the positive aspects of *rehabilitation*; conversely, negative is defined as a statement reflecting a negative attitude and pessimism, that is, focusing on the negative aspects of the *injury*. It was also observed that, at least for some of the slow healers, there was a sense of gain or satisfaction derived from being injured. One subject enjoyed being served by family members ("they were my slaves!") and others enjoyed the increased attention they received or the decrease in demands or pressure.

In many cases responses appeared to be either internal or external in nature, which perhaps reflects internal versus external locus of control. The fast group had more responses of an internal nature, indicative of greater feeling of personal control over their bodies and themselves.

A synopsis and commentary on the qualitative responses to the questions in the survey follows:

What Helped the Most. In response to the question, "What, if anything, do you think helped you the most to get better?" the fast healing group tended to take personal responsibility for their healing such as creative visualization, determination, desire, attitude, goal setting, or social support whereas the slow group looked more to outside factors such as physiotherapy and rest. When asked, "What, if anything, do you think hindered you the most from getting better?" the fast group tended to not even respond to this question.

Mind Over Body. In response to the question, "Do you believe that what you think can affect your healing?" (0–10), the overall numerical average for all groups indicated a high belief in the mind/body relationship ($M=8$). However, there were differences in responses regarding how the mind affects recovery. The fast healing group tended toward answers of internal personal control. For example, "My thoughts, and the energy of them, create my reality." "Chemical imbalances and hormones influence our mental state. The opposite must also be true." "Positive thinking gets the juices flowing."

The fast healing subject perceived him/herself to have direct control over the healing process, and had more elaborate answers of internal control. The slow healing group tended to perceive healing as something that happens to you—something that you can have little direct effect over other than going to physiotherapy. The average healing group displayed a wide range of responses. To a great extent, rate of healing seemed related to the belief factor in that if one believes he or she has control over recovery, he/she is more likely to exercise that control.

Level of Stress. The answers to the questions, "What was the level of stress in your life during your recovery period?" and "Overall, how much control did you feel you had over the stress?" indicated that the perception of stress is very individualized. This has been supported by several researchers in the field (Lazarus & Folkman, 1984). It is not so much the level of stress but one's perceived control over events that appear to be the critical factor in dealing with stress. More in-depth probing or individual interviewing is required in order to understand more fully how perceived control over stress relates to recovery.

Social Support. The social support question was, "Did you get much support from people during your recovery such as from friends and family, coach, teammates, etc.?" followed by "Please describe the kind of support you had, if any, and from whom." While no differences were found between groups regarding their numerical responses on the 0–10 scale, differences were detected regarding their descriptions and interpretations of support. The differences related to superficial support (e.g., help with chores), contrasted with emotional support and encouragement. In future research, a more in-depth look at types of support would be necessary to know how it may relate to recovery time.

Self-Talk. With respect to self-talk, the subjects were asked, "Did you ever find you were talking to yourself?" "What proportion was positive and what was negative?" and "What did you usually say to yourself?" The responses to this question enabled a relatively straightforward content analysis. The self-talk ranged from very positive and self-encouraging to very self-deprecatory, self-pitying, and blameful. The differences found between the groups were the most clear-cut of all the open-ended variables tested. The fast healing group was highly positive, the slow healing group tended to be totally negative and unforgiving, and the average group was a combination of both.

The following are characteristic examples of positive self-talk from the fast healing group and characteristic examples of negative self-talk from the slow healing group:

Positive self-talk:

- I would have a conversation with my other self and ask myself what it made me realize about me and how to make the most of what could be done.
- I can do anything.
- When I had my velcro cast, I took it off and tried to walk. I told myself "I can do it," and that I can beat the odds and recover sooner than normal.
- I want to go spring skiing.
- I have to work to get my leg as strong . . . as the other one.
- It's feeling pretty good.
- I do not hurt (i.e., my ankle does not hurt).

Negative self-talk:

- Talked to myself about how frustrated I was, and that it would probably take forever to get better.
- What a stupid thing to do.
- Dumb mistake.
- Stupid fool!
- Stupid injury.
- Why me?

Fear of Reinjury. The responses to the question, "Did you have any thoughts, imaginings, or worries about reinjury? Please explain." included being very fearful of reinjury, fear generating greater caution, planning to take preventive measures, and no fears or worries at all. The fast healers were generally less fearful or concerned about reinjury compared to the slower healers. Where fears of reinjury did surface in the faster healers, they were modified by a desire to just be more careful and to exercise greater control in the future. Respondents in the slow healing group tended to dwell on the negative possibilities.

Goal Setting. The questions asked about goal setting were as follows: "Did you set any goals for recovery?" "Did you set any long-term goals for recovery?" and "Did you set any goals about your return to sports? If so, to what extent?" Subjects were asked to provide examples for each case. It was clear that fast healers were much more involved in goal setting than slow healers. It has been suggested that goal setting also involves a form of imagery (Syer & Connelly, 1984). The extent of goal setting therefore may be an indirect link to the extent of mental imagery taking place. The very process of setting a goal is a statement of expectation, and hence a conceptualization of success is also likely to occur. It is likely that once a goal is set, a person will periodically contemplate achieving that goal. This may serve to conjure up an image of those activities one can engage in that are consistent with achieving that goal. It would also follow that daily goals would be the most effective toward this end. The results from this survey confirm this, in that daily goal setting was found to be more related to recovery time than either the long-term or return-to-sport goals.

Imagery. The basic questions for imagery were as follows: "Did you do any healing imagery, where you tried to see or feel the body parts heal?" "Did you do any imagery during physiotherapy, of physiotherapy promoting recovery, seeing and feeling recovery?" "Did you do any imagery trying to imagine yourself totally recovered and performing your sport well again?" and "Did you ever replay your injury? If yes, how often?" These were followed with extensive questions regarding the content, frequency, and extent to which imagery was internal, external, could be felt, and the extent of control over the imagery.

Of the three kinds of imagery questioned, healing imagery evidenced the greatest relationship to recovery time. It appeared, however, that positive healing and/or performance imagery was related to a faster recovery time only when the subject did not also report extensive injury-replay imagery. This suggests that one may counteract the other. There have been reported case studies with athletes (Foster & Porter, in press) whereby negative images (e.g., of the injury as it occurred, became inflamed, torn) has interfered with positive imagery of healing and recovery. Future studies obtaining more complete answers regard-

ing the extent and type of replay imagery and healing imagery may help to complete the picture. Individual in-depth interviews with exceptional healers are recommended. Imagery remains a very worthwhile and compelling area of study with respect to harnessing our internal healing resources.

Lessons and/or Benefits. Subjects were asked whether the time out that the injury provided resulted in any valuable lessons or new perspectives that contributed toward future achievement. The fast group had more positive things to say and derived greater benefits in the form of lessons learned, which enhanced both their insight and enjoyment of their sport. Those athletes who learned from the experience and viewed it as an opportunity fared better in terms of their recovery time as well. They made the most of a bad situation.

Conclusions

The results of this study support the capacity of the mind to take an active role in promoting personal healing. The active variables of positive self-talk, goal setting, and healing imagery were most closely associated with fast healing. These are the variables that are highly relevant for healers as well as those who are trying to heal themselves, for these are the factors that are within an individual's potential control. It is suggested therefore that in-depth interviews be conducted with exceptionally fast healers, that survey studies be done with greater numbers of subjects which would permit the use of a multiple regression analysis, and that intervention studies be conducted drawing upon the mental links to healing supported by this study.

Practical Suggestions

The following are suggestions derived from the literature, observations from this study, clinical interventions, and experience with injured athletes.

For the injured person:

- Set daily goals for healing and improvement as well as long-term goals.
- Develop a physiotherapy plan and mentally prepare for optimal healing.
- Do mental imagery of healing and of achieving goals.
- Emphasize positive aspects of the recovery.
- If the injury must be described, always attempt to follow it with a positive statement or image about recovery (if not out loud, at least to yourself).
- Say positive things to yourself about your rehabilitation and your future performance possibilities, every day.
- Be alert to negative self-talk, acknowledge it, address any pertinent issues it may raise, and then refocus to positive thoughts and images.
- Be kind, encouraging, and forgiving with yourself.
- Talk positively to the specific healing part.
- Spend time doing healing imagery every day.
- Find out as much as possible about the physical components of physiotherapy and healing, and incorporate them into your healing imagery.
- Be alert to any negative imagery or replays of the injury. Change the image to a positive, healing one.

For those helping an injured person:

- Show compassion while encouraging and supporting progress.
- Support the athlete's capacity to influence his or her own healing.
- Maintain contact and involvement with the injured person.
- Be alert to individual concerns and reactions to the injury.
- Listen.
- Show that you care.

We encourage further applied research on the mental aspects of healing, and hope that sport psychology practitioners and athletes alike begin to make greater use of mental skills for enhanced injury rehabilitation and personal well-being.

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