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ABSTRACT

The introduction of this investigation into superstitions of athletes reviews past research on the subject. It is stated, though, that general research on superstitions mentions little directly related to sports; so, by necessity, recourse is made to sports stories and newspaper and magazine articles. The main body of this paper presents results from a questionnaire on personal superstitions submitted to male and female intercollegiate athletes and male and female nonathletes. Tables with results and comparative figures are included in the text. The paper states that athletes were revealed as no more superstitious than nonathletes in the realm of general superstitions, although they did list more superstitions pertaining to sports than nonathletes did; females in both instances were more superstitious than males but males had more sports-related superstitions. Many sports-associated superstitions, it is stated, seem related to certain aspects of general superstitions (e.g., female athletes' concern for uniform and hair, social activities; male athletes' concern for food, position or playing order, travel dates and times). The conclusion of this paper, on the basis of this study and previous research, presents two general statements as to superstitions: a) under the impact of stress (in this case athletics), even educated people seek emotional balance; b) people don't become less superstitious with time but rather change the nature of their beliefs. (JA)

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SUPERSTITION IN SPORT

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SUPERSTITION IN SPORT

INTRODUCTION

Gardiner's statement that "Athletes have always been a superstitious class",¹ typifies the stereotyped view of many people who unquestioningly assume that athletes are superstitious. Sports reports featured in newspapers and magazines perpetuate this belief through their articles which expose and magnify a few players' "superstitious" idiosyncrasies; they confirm the untested public assumptions regarding the athletic institution of our society.

According to the London Evening Free Press, "Superstition is beginning to play a vital role in the Major Junior 'A' hockey success of the London Knights."² Coach Bronco Horvath continued to wear the same brown suit in which he coached and won the previous games while Team Captain Reg Thomas used the same stick during play. As stated by Horvath:

We haven't lost a game this year while I've been wearing this outfit. It doesn't score goals but there's no way I'm changing now.³

In this same article was quoted Thomas' report of an incident following the game in which he had scored four goals. He gave his stick to a young fan, and the report read:

'Anyway, our trainer Don Brankley saw me give the stick away then went chasing down the hallway after the kid to get it back. I guess he felt it was a lucky stick too. He has really taken care of it for me. He puts it in the rack with all the other sticks but he makes sure nobody else touches it.'⁴

It is interesting to note that much of the article is devoted to covering the superstitious elements in the game rather than the aspects of game play and strategy, and that the superstitious beliefs filter throughout the team, in this instance, from the coach and play- to the manager.

Some athletes admit to their superstitions, and naturally enough, they are reported to the public without hesitation. For example, the Candian Magazine quoted Keith Magnuson (a defenseman for the Chicago Black Hawks of the National Hockey League) as remarking:

'I believed girls dulled your desire for sports, so I stayed away from them. When I got to college though, I changed my mind. I started looking at something else other than pucks. But... even then, if I took a girl to a game and we lost that game, I never dated her again. I felt she distracted me from my concentration. Call it superstition, if you want, Or just crazy.'⁵

In short, through the mass media people believe that athletes are superstitious, but in fact, are their untested assumptions warranted?

Definition of Terms

In the context of this paper, superstition is regarded as a "belief that one's fate is in the hands of unknown external powers governed by forces over which one has no control."⁶ In the scientific sense, superstition is fundamentally irrational; however, superstitious beliefs are popularly accepted as evidenced in the emotional behaviour of the holder. Additionally, holding a superstition carries a pejorative taint in that some people don't wish to admit to this form

of belief.^{6,7} Since these beliefs are transmitted via social interaction,⁸ they are reflected in human experiences within athletic organizations. Their existence within the sphere of athletics requires investigation.

For the purposes of this study, athletes refer to male and female, full or part-time students at the University of Western Ontario who played on one or more of six selected intercollegiate teams (basketball, volleyball, hockey, track and field, swimming, and tennis), during the 1971-1972 academic year, and who were awarded first, second or third colour letters (males; first or second colours only, and females first, second or third colours), as specified under the rules of eligibility in the University of Western Ontario Student Handbook, 1970. On the other hand, non athletes in this study refer to randomly selected University of Western Ontario students who did not play on these six selected intercollegiate athletic teams during the 1971-1972 academic year.

Review of Related Literature

The origin of most superstitions can be traced to fears experienced individually or collectively and transmitted as part of experience. Since antiquity, most irrational beliefs have been associated with human helplessness in the face of insurmountable difficulties or impending catastrophies.⁹ Fear of the unexplainable, unpredictable, and destructive (associated with death) forces of man's natural environment (hurricanes, droughts, starvation, illness) gave rise to superstitious beliefs and overt practices (e.g. dances to ward off impending

danger or to heal the sick).¹⁰

Unfortunately, of the numerous studies based on the theme of superstition,¹¹ none was found relating superstition directly to inter-collegiate athletes; and only one was found which post-dated the forties.¹²

The summary of findings for prior research investigations on this theme indicate that: (1) belief in superstition seems to decrease with age as well as with increased educational attainment; (2) women are more superstitious than men; (3) specific instruction reduces belief in superstition; (4) sources of superstitious beliefs vary, but the most prominent source is related to their transmission in primary relationships (family, friends, and close associates outside of the home setting), and (5) emotion has a positive correlation with these beliefs.¹³

Of the numerous studies previously mentioned, only those by Conklin¹⁴ and Emme¹⁵ discuss superstitions connected with sport. Conklin indicated that the superstitions of females were most objective and external. Moreover, he reported that not one of the women over his four year study period (1913-1917) mentioned a superstition linked to sport. Their superstitions were more closely allied to the home, visiting friends and vice versa, social functions (teas and volunteer work), wishes, wants, love, marriage and death; whereas the men's superstitions were more concerned with sports and business.

In the realm of sports, the men considered it unlucky to: (1) have one's picture taken before a ball game; (2) chew gum while playing

ball; (3) have a funeral pass in front of a player before a football game; (4) enter a track meet wearing clean pants; (5) miss baskets while warming up for the game; (6) shave before a game, and (8) change a broken shoe lace on the day of a game. Naturally, good luck was considered the opposite of the above; for example, entering a track meet wearing dirty pants. In addition, the numbers 3 and 9 and the 7th inning were considered lucky.

One unusual belief was the slapping on one's finger in spit placed in the opposite hand to indicate the direction of a lost golf ball via the direction of the spray.¹⁶ In a case study, a student interviewed by Emme¹⁷ mentioned that he liked to wear a certain shirt when he wanted to play a good game of baseball.

These instances support Conklin's earlier study which indicated that superstitious practices are linked to sports, and furthermore, it implies that there are different degrees of seriousness of belief in superstition as it affects performance in sports (e.g. the latter case portrays mild enjoyment from a minor superstitious practice of wearing a particular article of clothing in order to play a good game.

Since there have been no known research investigations studying this specific area of athletic superstitions, one is forced to turn to sports stories, magazine, newspaper and journal articles to find additional information on this topic. The evidence, although conjectural in most cases, is voluminous. Wright,¹⁸ Seitz,¹⁹ and Scott,²⁰ implied that there were superstitions associated with colour, King²¹ suggested that some superstitions held by athletes may revolve about the presence

of certain spectators in the audience; Arond and Weinberg,²² and Alderman²³ hinted that these beliefs may relate to eating certain types of food, while Tower²⁴ noted the use by jockeys of good luck charms in races.

It has been noted that many of the athletes personal beliefs may be reflected in superstitious tendencies. Stump²⁵ wrote of Juan Marichal's (baseball pitcher for Los Angeles Dodgers) excessive concern with the manicuring of his fingernails, while the Globe and Mail²⁶ attributed the improvement of Tom Steen's (an Oshawa curler who competed in the Consols challenge round leading to the Ontario playoffs) curling to his sideburns and mustache. The use of religious medals and prayers in sports have been reported by Davis,²⁷ Kahn,²⁸ Arond and Weinberg,²⁹ King,³⁰ and Gildea,³¹ to name a few.

Athletes are not the only ones vulnerable to superstitions during a game. Time³² reported the superstitions of fans watching a baseball game, and the London Free Press³³ commented on its prevalence among spectators watching last year's Calgary vs. Toronto Grey Cup football game. Barnard³⁴ wrote of an instance where a little girl sent Jim Hurtubise (an automobile racer hurt in an accident) her lucky \$2.00 bill to help him get well. And to conclude this section, Weiskopf's article³⁵ told of the gypsy fortune-teller's influence upon the success of Joe Weider, a body builder.

Hypotheses

The findings from the previous investigations on superstitious beliefs provide the bases for the following hypotheses:

- (1) The greater the involvement in athletics, the greater the degree of endorsement of superstitions associated with sport.

In the present study, it was believed that the intercollegiate athletes would indicate a greater number of sports-related superstitions than the nonathletic students.

- (2) The frequency of endorsement of superstitious beliefs vary by sex.

The female members of the sample were expected to identify more general superstitions than the males, but the males were expected to list more sports-related superstitions.

- (3) Female superstitious beliefs will be directly related to personal appearance and social functions, while male superstitions will be directly related to occupational considerations (routine, finance, and travel).
- (4) Sports-related superstitious beliefs identified by nonathletes will vary in relation to exposure to the mass media.

RESULTS AND DISCUSSION

In order to study the prevalence of superstition in sport, a questionnaire was pre-tested and distributed to 348 students selected at random from lists of athletes (sample N=174) and nonathletes (sample N=174) enrolled at the University of Western Ontario for the 1971-72 academic year.

The responses of the intercollegiate athletes (N=137); males 66, females 71), and the non athlete group (N=115; males 52, females 63), comprised 73.26 per cent and 66.09 per cent respectively of the total 69.81 per cent return rate.

The open ended questions indicated that although the athletes listed fewer superstitions than the non athletes in the realm of general superstition, they were more aware of these beliefs in sport. When the general superstitions were ordered by frequency of endorsement for each category, it was found that the sports-related category ranked 13th out of 35 rankings. Athletes ranked this item 10th out of 30 rankings (male athletes 6th out of 21 rankings and female athletes 14th out of 22 rankings). Non athletes ranked this item 14th out of 29 rankings (males 9th out of 18 rankings and females 17th out of 24 rankings). Thus, unlike Conklin's investigation which reported that the females did not mention such beliefs, this study found that the males and females from both groups listed superstitions connected to athletics. Perhaps this can be accounted for by the impact of the mass media, which of course has demonstrated considerable technological development and refinement (especially the introduction of satellite communications) since the 1917 study. Another factor which could be responsible for females listing superstitions associated with sport is their increased participation in athletics, and their greater exposure to the social process operative to transmit such beliefs in athletics.

Table 1 indicates that the athletes listed fewer general superstitions (e.g. black cats) than did the non athletes, and furthermore, that the females in both groups listed more general superstitions than did the males. This finding re-affirms the previous studies on superstition by which females in the groups investigated were deemed to be more superstitious than males.

TABLE 1

FREQUENCY OF ENDORSEMENTS FOR MALE AND FEMALE
INTERCOLLEGIATE ATHLETES AND NON ATHLETES BY
GENERAL SUPERSTITION (N=252)

General Superstition Related to...	Overall f	Athletes (N=137)			Non Athletes (N=115)		
		Male (N=66)	Female (N=71)	f	Male (N=52)	Female (N=63)	f
Black Cats	173	40	53	93	32	48	80
Ladders	166	38	46	84	32	50	82
Numbers	136	33	47	80	26	30	56
Mirrors	117	29	34	63	20	34	54
Spices	111	16	29	45	28	38	66
Rabbits Feet	109	28	31	59	29	21	50
Touch Wood	87	16	30	46	20	21	41
Coins	86	12	26	38	17	31	48
4 Leaf Clover	85	12	23	35	16	34	50
Hands/Feet	72	9	30	39	8	25	33
Clothes	66	23	9	32	9	25	34
Horseshoes	58	12	18	30	19	9	28
Sports	54	27	9	36	11	7	18
Umbrellas	49	11	16	27	8	14	22
Sidewalk Crack	46	10	14	24	9	13	22
Days	45	12	4	16	9	20	29
Weather	29	8	7	15	4	10	14
Speaking	28	4	6	10	7	11	18
Religion	28	12	3	15	8	5	13
Charms	28	13	3	16	4	8	12
Weddings	26	5	5	10	1	15	16
Bugs/Insects	25	10	4	14	9	2	11
Stars	23	4	6	10	5	8	13
Birds	19	6	2	8	3	8	11
Sayings	19	4	2	6	7	6	13
Colours	17	3	5	8	3	6	9
Jewels/Jewellery	16	6	2	8	2	6	8
Beds	13	2	2	4	5	4	9
Women	13	9	1	10	2	1	3
Fate	13	3	6	9	1	3	4
Doors	13	2	4	6	2	5	7
Astrology	11	5	3	8	2	1	3
Cards	11	4	0	4	3	4	7
Cutlery	11	0	1	1	2	8	10
Food	11	4	4	8	1	2	3
Wishing Wells	10	1	6	7	1	2	3
Wishbones	10	1	5	6	2	2	4

Continued

TABLE 1 (Continued)

FREQUENCY OF ENDORSEMENTS FOR MALE AND FEMALE
INTERCOLLEGIATE ATHLETES AND NON ATHLETES BY
GENERAL SUPERSTITION (N=252)

General Superstition Related to...	Overall f	Athletes (N=137)			Non Athletes (N=115)		
		Male (N=66)	Female (N=71)	f	Male (N=52)	Female (N=63)	f
Routine	10	10	0	10	0	0	0
Lucky Persons	10	3	3	6	0	4	4
White	9	4	2	6	0	3	3
Nature	9	1	3	4	1	4	5
Good Samaritan Concept	9	3	3	6	0	3	3
Babies and Children	9	1	0	1	0	8	8
Facial Features	8	0	5	5	0	3	3
Pins	7	1	4	5	0	2	2
Childhood Beliefs	7	0	1	1	3	3	6
Crossing self	6	4	0	4	1	1	2
Irish Luck	6	2	2	4	1	1	2
Opposites	6	3	0	3	0	3	3
Right Hand Side	5	0	4	4	0	1	1
Stairways	5	0	2	2	1	2	3
Moon	5	0	0	0	3	2	5
Domestic Chores	5	0	2	2	0	3	3
Birthday Candles	5	0	2	2	2	1	3
Dating	5	0	0	0	0	5	5
Journey Signs	4	1	0	1	1	2	3
Howling Dogs	4	0	2	2	1	1	2
Dreams	4	0	1	1	0	3	3
Tea	4	0	0	0	2	2	4
Foreign Supersti- tions	3	1	0	1	1	1	2
Conflict Signs	3	1	0	1	0	2	2
School	3	2	0	2	0	1	1
Intense Concentra- tion	2	0	2	2	0	0	0
Pictures	2	2	0	2	0	0	0
Illnesses	2	0	0	0	0	2	2
Totals	1891	373	534	907	384	600	984

TABLE 2

FREQUENCY OF ENDORSEMENTS FOR MALE AND FEMALE
INTERCOLLEGIATE ATHLETES AND NON ATHLETES BY
SPORT SUPERSTITION (N=252)

Sport Superstition Related to...	Overall f	Athletes (N=137)			Non Athletes (N=115)		
		Male (N=66)	Female (N=71)	f	Male (N=52)	Female (N=63)	f
Uniform	268	77	117	194	35	39	74
Equipment	169	81	25	106	42	21	63
Clothes	125	52	32	84	20	21	41
Routine	87	46	27	73	9	5	14
Charms	55	14	23	37	5	13	18
Food	46	19	14	33	4	9	13
Numbers	44	8	17	25	9	10	19
Position or							
Playing order	37	20	12	32	5	0	5
Balls	34	12	11	23	6	5	11
Coaches	33	11	8	19	6	8	14
Religion	31	14	5	19	7	5	12
Repetitive							
Actions	27	14	5	19	7	1	8
Spectators	26	14	3	17	4	5	9
Sports Persons	26	9	3	12	8	6	14
Speaking	25	2	10	12	5	8	13
Hair	24	1	19	20	0	4	4
Dressing Room	22	15	4	19	2	1	3
Team Cheers	19	2	11	13	0	6	6
Crossing self	17	7	3	10	2	5	7
Personal Belief	16	6	4	10	5	1	6
Jewels or Jew-							
ellery	15	9	4	13	0	2	2
Coins	14	10	3	13	0	1	1
Colours	14	3	3	6	3	5	8
Facilities	13	4	4	8	3	2	5
Travel	11	7	0	7	3	1	4
Hands	9	2	4	6	1	2	3
Dates, Toss of							
Coin, Past							
Team Records	8	5	3	8	0	0	0
Progame Night	8	1	6	7	0	1	1
Scoring	8	0	5	5	3	0	3
Whites	8	6	1	7	0	1	1
Time	8	5	1	6	1	0	1
Good Samaritan							
Concept	7	5	0	5	1	1	2

Continued

TABLE 2 (Continued)

FREQUENCY OF ENDORSEMENTS FOR MALE AND FEMALE
INTERCOLLEGIATE ATHLETES AND NON ATHLETES BY
SPORT SUPERSTITION (N=252)

Sport Superstition Related to...	Overall f	Athletes (N=137)			Non Athletes (N=115)		
		Male (N=66)	Female (N=71)	f	Male (N=52)	Female (N=63)	f
Rabbits Feet	7	2	0	2	2	3	5
Not Shaving	7	2	3	5	2	0	2
Rules	4	1	2	3	1	0	1
Sex	3	1	0	1	2	0	2
Weather	3	2	1	3	0	0	0
Injury or Illness	2	2	0	2	0	0	0
Intense Concentration	2	1	0	1	1	0	1
Horseshoes	2	0	1	1	0	1	1
Touching Wood	1	0	0	0	0	1	1
Opposites	1	1	0	1	0	0	0
Picture Taking	1	0	1	1	0	0	0
Irish Luck	1	0	1	1	0	0	0
Fate or Predestination	1	0	1	1	0	0	0
Dating	1	1	0	1	0	0	0
Birds	1	0	0	0	0	1	1
Cards	1	0	0	0	1	0	1
No Response	52	6	7	13	18	21	39
	1344	502	402	904	224	216	440

The athletes listed more than twice the number of superstitions associated with sport than did the non athletes, and the males in both groups listed more such beliefs than did their female counterparts even though their numbers were fewer overall. Obviously, the preceeding facts indicate a difference in the frequency of endorsements between the males and females of each group (athlete differential of the frequency of endorsements by sex = 100, and non athletes differential by sex = 3). These findings lend strong support for the initial two hypotheses of this investigation whereby the intercollegiate athletes (and especially the male athletes) greater involvement in sport related to their higher number of endorsements for superstitious beliefs in athletics (Table 2).

Of the intercollegiate athletes, only 9.48 per cent of the respondents indicated that they knew of no superstitions associated with sport (males=9.02 per cent, females=9.86 per cent), and this compared to 33.90 per cent of the non athletes (male=30.77 per cent, females=30.00 per cent). Thus it appeared from this data that the majority of superstitions associated with athletes are learned through the internal social structures operating within the various sports.

In examining Table 2, intragroup comparison indicates that female athletes endorsed a greater number of superstitious beliefs related to personal appearances (e.g. uniforms and wearing special hair accessories when playing in a game); and socially related functions such as team cheers and pre-game night activities, than did their male counterparts. The belief that it is bad luck to shake hands with

an opponent who wears a glove was also given higher endorsement by the women athletes. In addition, this same group was more aware of superstitions linked to speaking with team-mates, particularly the phrase "break a leg" to wish a team member good luck, and wearing favourite charms (inside shoes, tied on shoelaces, taped to equipment or worn on necklaces and bracelets) or numbers during play.

On the other hand, the male athletes listed superstitions that were indirectly related to business ventures, yet specifically bound within certain aspects of sport. Their greater concern with clothes worn before and after a game (suits and ties); routines practiced on the day of the game; the time of the match; past team win-loss records; the date of the match; foods eaten before a contest; position or playing order when entering a field, arena, etc.; and the Good Samaritan concept (or the belief that you will be rewarded for good deeds done to your opponents in a game), lists only a few of the sports-related superstitions linked indirectly to business practices. They also listed a greater number of superstitions associated with equipment; such as the order it is put on; religious practices, such as crossing oneself before a contest, with no mention of a particular faith; and repetitive actions, such as touching first base after each inning. They are also more aware of their coaches' superstitions.

Like the female athletes, the female non athletes gave higher endorsements for the categories of uniforms, charms, speaking, hair, and team cheers than did their male counterparts. They also exhibited a greater number of endorsements for food, coaches, crossing oneself,

and the wearing of jewellery than did their male counterparts. Colour was also given higher recognition by this female group.

Similarly, through intergroup comparison, the male non athletes, when compared to their female counterparts, were more aware of superstitions in sport related to equipment, routine, position and playing order, religion, repetitive actions, sports persons (i.e. the knowledge of superstitions reported or published of people involved in sport, such as listing Phil Esposito's belief that wearing a black turtleneck sweater under his hockey uniform will bring him luck), personal belief and travel (i.e. beliefs of what forms of transportation are lucky, in addition to belief about where one should sit in relation to other team-mates while travelling to the match). Sex and not-shaving were also accorded a higher level of endorsement by the male non athletes. Speaking (e.g. "break a leg") was the only category which received a greater number of endorsement among the male non athletes when compared to the male athletes. Conversely, female non athletes knew of more superstitions related to spectators in the audience, sports personalities, crossing oneself (e.g. a particular religious faith is mentioned), colours and rabbits feet.

A further breakdown of these major categories revealed that the males of both groups accorded higher status for all sub-categories of equipment than did their female counterparts (Table 3). With the exceptions of order of dressing, and the mentioning of lucky colours, the female athletes gave higher endorsements for the sub-categories of uniforms that included lucky socks, numbers, shoes and underwear, to name a few.

TABLE 3

FREQUENCY OF ENDORSEMENTS FOR MALE AND FEMALE
INTERCOLLEGIATE ATHLETES AND NON ATHLETES BY
SPORT SUPERSTITION SUB-CATEGORIES (N=252)

Sport Superstition Related to...	Overall f	Athletes (N=137)			Non Athletes (N=115)		
		Male (N=66)	Female (N=71)	f	Male (N=52)	Female (N=63)	f
<u>Equipment</u>							
specific type	75	30	10	40	24	11	35
altering it	35	23	2	25	6	4	10
order of use/dress	26	14	6	20	4	2	6
general mention	23	10	4	14	5	4	9
dirty	7	4	3	7	0	0	0
old	3	0	0	0	3	0	3
Totals	169	81	25	106	42	21	63
<u>Uniform</u>							
socks	57	12	30	42	9	6	15
number	43	11	17	28	4	11	15
shoes	38	11	12	23	7	8	15
order of dress	28	16	7	23	2	3	5
underwear	21	8	10	18	3	0	3
specific type	19	4	8	12	2	5	7
not washing	18	4	10	14	1	3	4
general mention	15	3	9	12	3	0	3
colour	12	6	4	10	1	1	2
sweatshirt	11	0	8	8	1	2	3
others	6	2	2	4	2	0	2
Totals	268	77	117	194	35	39	74
<u>Clothes</u>							
general mention	50	18	15	33	8	9	17
hats	38	14	9	23	7	8	15
suit or tie	17	10	3	13	2	2	4
specific others	14	9	2	11	1	2	3
gloves	4	1	2	3	1	0	1
old	2	0	1	1	1	0	1
Totals	125	52	32	84	20	21	41
<u>Routine</u>							
general mention	44	24	10	34	7	3	10
warm-up	35	17	14	31	2	2	4
specific type	8	5	3	8	0	0	0
Totals	87	46	27	73	9	5	14

TABLE 3 (Continued)

FREQUENCY OF ENDORSEMENTS FOR MALE AND FEMALE
INTERCOLLEGIATE ATHLETES AND NON ATHLETES BY
SPORT SUPERSTITION SUB-CATEGORIES (N=252)

Sport Superstition Related to...	Overall f	Athletes (N=137)			Non Athletes (N=115)		
		Male (N=66)	Female (N=71)	f	Male (N=52)	Female (N=63)	f
<u>Spectators</u>							
athletes friends	11	7	1	8	0	3	3
spectators habits	10	5	2	7	3	0	3
athletes opinion	5	2	0	2	1	2	3
Totals	26	14	3	17	4	5	9
<u>Religion</u>							
prayers	16	5	3	8	5	3	8
general mention	11	5	3	8	2	1	3
medals	4	2	1	3	0	1	1
Totals	31	12	7	19	7	5	12
<u>Numbers</u>							
general mention	27	6	11	17	4	6	10
thirteen	3	2	3	5	1	3	4
specific others	5	0	2	2	3	0	3
three	3	0	1	1	1	1	2
Totals	44	8	17	25	9	10	19
<u>Hair</u>							
accessories	19	0	15	15	0	4	4
general mention	5	1	4	5	0	0	0
Totals	24	1	19	20	0	4	4
<u>Hands</u>							
general mention	6	1	2	3	1	2	3
fingers	3	1	2	3	0	0	0
Totals	9	2	4	6	1	2	3
<u>Charms</u>							
general mention	34	11	12	23	2	9	11
specific types	21	3	11	14	3	4	7
Totals	55	14	23	37	5	13	18
<u>Coins</u>							
specific types	8	4	3	7	0	1	1
general mention	6	6	0	6	0	0	0
Totals	14	10	3	13	0	1	1
<u>Food</u>							
general mention	29	12	8	20	3	6	9
specific varieties	17	7	6	13	1	3	4
Total	46	19	14	33	4	9	13

Using Spearman's rank-order correlation coefficient to determine differences in rankings among sub-groups, a method reported by Sutton-Smith and Rosenberg,³⁶ it was found that:

- (1) The ranking of sport superstitions (in order of decreasing order for frequency of endorsement) were substantially similar between the athletes and the non athletes ($r_s=0.8165$, p less than .01).
- (2) There was a greater similarity in the lists of superstitions endorsed for the males of both groups ($r_s=0.8254$, p less than .01), than for their female counterparts ($r_s=0.6440$, p less than .05).

TABLE 4

INTERCOLLEGIATE ATHLETES AND
NON ATHLETES BY SPORT SUPERSTITION
(N=252)

Sport Superstition Related to...	Athletes (N=137)		Non Athletes (N=115)	
	Rank	f	Rank	f
Uniform	1	194	1	74
Equipment	2	106	2	63
Clothes	3	84	3	41
Routine	4	73	6	14
Charms	5	37	5	18
Food	6	33	7	13
Order/Playing Position	7	32	14	5
Numbers	8	25	4	19
Balls	9	23	9	11
Hair	10	20	15	4
Religion	11	19	8	12
Repetitive Actions	11	19	11	8
Dressing Room Activities	11	19	16	3
Coaches	11	19	6	14
Spectators	12	17	10	9
Team Cheers	13	13	13	6
Jewels or Jewellery	13	13	17	2
Coins	13	13	18	1
Speaking	14	12	7	13
Sports Persons	14	12	6	14
Personal Beliefs	15	10	13	6
Crossing Oneself	15	10	12	7
$r_s=0.8165$, p less than .01.				

Although there was a high overall positive correlation between the superstitions of the athletes compared to the nonathletes, there were differences in the rankings of the two groups on certain categories associated with superstition in sport. As Table 4 indicated, routine, position and/or playing, wearing of hair accessories, dressing room activities, wearing jewellery and coins were ranked higher by the athletes; whereas numbers, coaches, speaking and sports persons accorded higher support by the nonathletes.

TABLE 5

MALE INTERCOLLEGIATE ATHLETES AND MALE NON
ATHLETES BY SPORT SUPERSTITION (N=118)

Sport Superstition Related to . . .	Male Athletes (N=66)		Male Non Athletes (N=52)	
	Rank	f	Rank	f
Equipment	1	81	1	42
Uniform	2	77	2	35
Clothes	3	52	3	20
Routine	4	46	4	9
Order/Playing Position	5	20	8	5
Food	6	19	9	4
Dressing Room Activities	7	15	11	2
Spectators	8	14	9	4
Religion	8	14	6	7
Repetitive Actions	8	14	6	7
Charms	8	14	8	5
Balls	9	12	7	6
Coaches	10	11	7	6
Coins	11	10	13	0
Sports Persons	12	9	5	8
Jewels or Jewellery . .	12	9	13	0
Numbers	13	8	4	9
Travel	14	7	10	3
Crossing Oneself	14	7	11	2
Personal Beliefs	15	6	8	5
White	15	6	13	0

$r_s = 0.3254$. p less than .01

Table 6

FEMALE INTERCOLLEGIATE ATHLETES AND FEMALE NON
ATHLETES BY SPORT SUPERSTITION (N=134)

Sport Superstition Related to	Female Athletes (N=71)		Female Non Athletes (N=63)	
	Rank	f	Rank	f
Uniform	1	117	1	39
Clothes	2	32	2	2
Routine	3	27	9	4
Equipment	4	25	2	21
Charms	5	23	3	13
Hair	6	19	9	4
Numbers	7	17	4	10
Food	8	14	5	9
Order/Playing Position	9	12	13	0
Team Cheers	10	11	7	6
Balls	10	11	3	5
Speaking	11	10	6	8
Coaches	12	8	6	8
Pre-game Night Activities	13	6	12	1
$r_s = 0.6440$ p less than .05				

When looking at the differences in the rankings of athletes and non athletes by sex, one notices that the male athletes ranked order and playing position, food, and dressing room activities higher than did the male non athletes, whereas the latter group ranked sports persons, wearing of lucky numbers, travel components and personal beliefs much higher than did the male non athletes. On the other hand, routine, hair accessories and order or playing position, were ranked higher by female athletes than non athletes of the same sex. This latter group ranked numbers, food, team cheers, speaking, and coaches higher than did the female athletes (Tables 5 and 6).

Discussion

Although athletes were no more superstitious than non athletes in the realm of general superstition, they did list more superstitions pertaining to sport than the non athletes. Females of both groups endorsed a greater number of general superstitions, whereas males of

both groups listed a greater number of superstitions associated with sport. This is probably due to the fact that they were more often directly or indirectly involved in the web of social relationships responsible for the transmission of such beliefs.

As superstition holds a pejorative taint for most people, it is surprising that 35 per cent of athletes openly admitted to the holding of such beliefs. However, as 51 per cent of this same group stated that they knew of other people involved in sport who held such beliefs, but stated that they held none themselves, this pejorative association with having superstitions may still remain true today.

Many of the superstitions associated with sport seem to be related to certain aspects of general superstition. The female athletes' higher endorsement for superstitions related to uniform, hair, team cheers, hands and social pre-game night activities appear to stem from their general superstitions (as indicated in Conklin's earlier study) in that they were closely allied to categories associated with social interaction. On the other hand, the general superstitions of the men which were associated with business ventures appear to be reflected in the male athletes' higher endorsements for the superstition categories of food, clothing, position or playing order, travel dates, time, and the Good Samaritan concept.

Finally, the male and female non athletes' higher endorsement and ranking of "sports persons" supported the hypothesis relating media influence upon the transmission of superstitions associated with sport. Its influence also holds true for the athletes, but to a

lesser extent, as it appears probable that they learned their superstitions in association with the specific sport in which they are engaged.

It would appear that one learns the superstitions of the sport in which he is most directly involved, either as a participant or spectator. The media transmits these beliefs in sport, and the spectators watching the contest associate the players' actions with these reports.

Conclusion

As the review of the literature indicates, emotions motivate superstitious behaviour and the environment suppresses some and enlarges upon others. Education can modify susceptibility, but only within certain limits. Under the impact of stress (as in the case of most athletic endeavours), even educated people search for emotional balance. Superstitious beliefs and practices are culturally relativistic; they are changeable under the auspices of scientific knowledge. People don't become less superstitious with the passage of time, but rather the nature of their beliefs changes with the times.

REFERENCES

23.

- 1 E. Norman Gardiner, Olympia: Its History and Remains (London: Oxford University Press, 1925), p. 169.
- 2 Ernie Miller, "It's No Time For Knights to Change," London Evening Free Press, January 10, 1972, p. 10.
- 3 Ibid.
- 4 Ibid.
- 5 Paul King, "Man O'War," Canadian Magazine, December 11, 1971, p. 12.
- 6 Gustav Johoda, The Psychology of Superstition (London: Allen Lane The Penquin Press 1969), p. 139.
- 7 Eugene E. Levitt, "Superstitions: Twenty-Five Years Ago and Today," American Journal of Psychology, LXV, 3 (July, 1952), p. 444.
- 8 Guy E. Swanson, The Birth of the Gods: The Origin of Primitive Beliefs (Ann Arbor, Michigan: The University of Michigan Press, 1960), p. 83.
- 9 G.E. Lundeen and J.B. Maller, "Superstition and Emotional Maladjustment," Journal of Educational Research, XXVII, 8 (April, 1934), p. 593.
- 10 Eugene S. McCartney; "The Superstition About Literal and Figurative Separation of Persons," Classical Journal, XLVIII, 2 (November, 1952), p. 74.
- 11 W. Caldwell and G.E. Lundeen, "A Study of Unfounded Beliefs Among High School Seniors," Journal of Educational Research XXII, 4 (November, 1930), pp. 257-273. (For additional sources consult bibliography).
- 12 Eugene E. Levitt, "Superstitions: Twenty-Five Years Ago and Today," American Journal of Psychology, LXV, 3 (July, 1952), pp. 443-449.
- 13 Earle E. Emme, "Modification and Origin of Certain Beliefs in Superstition Among College Students," Journal of Psychology, X (October, 1940), pp. 279-291.

- 14 E.S. Conklin, "Superstitious Beliefs and Practices Among College Students," American Journal of Psychology, XXX, I (January, 1919), pp. 83-102
- 15 Earle E. Emme, "Supplementary Study of Superstitious Beliefs Among College Students," Journal of Psychology, XII (October, 1941), pp. 183-184.
- 16 Conklin, "Superstitious Beliefs," pp. 83-102.
- 17 Emme, "Modification and Origin," 187.
- 18 Ern Wright, "Desolation on the Brink of Glory," World Sports, XXXVI, 8 (August, 1970), pp. 25-27.
- 19 Nick Seitz, "Is This The Man To Succeed Palmer?" in Best Sports Stories (1969 ed.; New York: E.P. Dutton & Co., Inc.), p. 171.
- 20 Marvin B. Scott, "The Man On The Horse," in Sport, Culture, and Society, ed. by John W. Loy Jr., and Gerald S. Kenyon (New York: The Macmillan Co., 1969), pp. 424-439.
- 21 King, "Man O'War," pp. 10-14.
- 22 Henry Aroné, and S. Kirson Weinberg, "The Occupational Culture of the Boxer, in Sport, Culture, and Society, ed. by John W. Loy Jr., and Gerald S. Kenyon (New York: The Macmillan Co., 1969), pp. 439-452.
- 23 Thomas Alderman, "Advice From A Strong Arm Waiter," Canadian Magazine, November 6, 1971, p. 7 and p. 9.
- 24 Whitney Tower, "A Commend Performance," Sports Illustrated, XXXII, 19 (May, 1970), p. 25.
- 25 A. Stump, "Always They Want More, More, More," Best Sport Stories (1969 ed., New York: E.P. Dutton & Co., 1968), pp. 83-92.
- 26 Steen's Curling Game Quite As Impressive As Mustache, Sideburns," Globe and Mail, December 11, 1971, p. 39.
- 27 Mac Davis, Football's Unforgettables, Bantam Pathfinder Editions (New York: Bantam Books Inc., 1971), pp. 59-63.
- 28 Robert Kahn, "An Hour Or So Of Hell," Best Sports Stories, (1969 ed., New York: E.P. Dutton & Co., Inc., 1969), p. 49.

- 29 Arond and Weinberg, "The Occupational Culture of the Boxer"; ; ;
pp. 439-452.
- 30 King, "Man O'War," p. 12.
- 31 William Gilea, "Time Stands Still At 1:07.6," Amateur Athlete,
XLI, 7 (July, 1970), p. 32.
- 32 "Series of Superstitions," Time, October 26, 1970, p. 15.
- 33 "Women Sweeps Winner Plays It Cool," London Evening Free Press,
November 29, 1971, p. 3.
- 34 Charles N. Barnard, "Go, Hercules! Go! Go! Go!," in Best
Sports Stories (1968 ed., New York: E.P. Dutton & Co., Inc.,
1968), pp. 223-240.
- 35 Herman Weiskopf, "Be A Take-Charge Blaster," Sports Illustrated,
XXXII, 14 (April, 1970), pp. 34-42.
- 36 B. Sutton-Smith and R.G. Rosenberg, "Sixty Years of Historical
Change in the Game Preferences of American Children,"
Journal of American Folklore, 74, 1961, pp. 17-46.

SELECTED BIBLIOGRAPHY

BOOKS

- Arond, Henry, and Weinberg, S. Kirson. The Occupational Culture of the Boxer. Sport, Culture, and Society. Edited by John W. Loy, Jr., and Gerald S. Kenyon. New York: The Macmillan Company, 1969, pp. 439-452.
- Barnard, Charles N. "Go Hercules! Go! Go! Go!" Best Sports Stories, 1968 ed. New York: E. P. Dutton and Co., Inc., 1968, pp. 223-240.
- Coffin, Tristram P., and Cohen, Hemming. eds. Folklore In America. New York: Doubleday & Co., Inc., 1966.
- Davis, Mac. Football's Unforgettables. New York: Bantam Books Co.
- Dresslar, F. B. Superstition and Education. Berkeley, Calif.: Berkeley University Press, 1907.
- Dundes, Alan. The Study of Folklore. New Jersey: Prentice-Hall, Inc., 1965.
- Ehre, Edward, and Marsh, Irving T. eds. Best Sports Stories. 1968 ed. New York: E. P. Dutton and Co., Inc., 1968.
- _____. Best Sports Stories. 1969 ed. New York: E. P. Dutton and Co., Inc., 1969.
- _____. Best Sports Stories. 1970 ed. New York: E. P. Dutton and Co., Inc., 1970.
- Fox, J. R. "Pueblo Baseball: A New Use for Old Witchcraft." Sport, Culture, and Society. Edited by John W. Loy, Jr., and Gerald S. Kenyon. New York: The Macmillan Company, 1969, pp. 136-144.
- Frayne, Trent, and Gzowski, Peter. Great Canadian Sports Stories: A Century of Competition. Toronto: The Canadian Centennial Publishing Co., Ltd., 1965.
- Gardiner, E. Norman. Olympia: Its History and Remains. London: Oxford University Press, 1925.
- Gmelch, George. "Magic in Professional Baseball." Games, Sport, and Power. Edited by George P. Stone. New Jersey: E. P. Dutton and Co., 1972, pp. 118-137.
- Goldman, Richard P. Sportswriters' Choice. New York: A. S. Barnes and Company, 1958.
- Johoda, Gustav. The Psychology of Superstition. London: Allen Lane The Penguin Press, 1969.
- Kahn, Roger. "An Hour Or So Of Hell." Best Sports Stories. 1969 ed. New York: E. P. Dutton and Co., Inc., 1969, pp. 40-50.

Knight, James A., and Slovenko, Ralph, eds. Motivations In Play. Games and Sports. Springfield, Illinois: Charles C. Thomas, Publisher, 1967.

Newham, W. Essay On Superstition. London: Ibotson and Palmer, Printers, 1830.

Scott, Marvin B. The Man On The Horse. Sport, Culture, and Society. Edited by John W. Loy Jr., and Gerald S. Kenyon. New York: The Macmillan Co., 1969, pp.424-439.

Seitz, Nick. Is This The Man To Succeed Palmer? Best Sports Stories. 1969 ed. New York: E. P. Dutton and Co., 1969, pp. 168-173.

Swanson, Guy E. The Birth of the Gods: The Origin of Primitive Beliefs. Ann Arbor, Michigan: The University of Michigan Press, 1960.

Toffler, Alvin. Future Shock. Bantam Books. Toronto: Random House Inc., 1970.

REPORTS - PUBLISHED

First Report of the Committee on Experimental Psychology. Proceedings of the American Society for Psychical Research. Professor C. S. Minot, Chairman. I, 3, 1887.

ARTICLES AND JOURNALS IN MAGAZINES

- Alderman, Thomas, "Advice From A Strong Arm Waiter." Canadian Magazine, November 6, 1971, pp. 7,9.
- Blackowski, S. "Magical Behaviour of Children In Relation to School." American Journal of Psychology. L, 1-4 (November, 1937), pp.347-361.
- Caldwell, O.W. "What Can Be Done Regarding Unfounded Beliefs?" School and Society. XXXVI (May, 1932), pp. 680-686.
- _____, and Lundeen, G.E. "A Study of Unfounded Beliefs Among High School Seniors." Journal Educational Research. XXII, 4 (November, 1930), pp.257-273.
- Conklin, E.S. "Superstitious Beliefs and Practices Among College Students." American Journal of Psychology. XXX, 1 (January, 1919), pp. 83-102.
- _____. "A Further Word On Superstitiousness." American Journal of Psychology. XXXII, 1 (January, 1921), p.158.
- Diserens, C.W., and Wood, T.W. "The Prevalence of Relief in Fortune Telling Among College Students." Journal of Applied Psychology. XX, 4 (August, 1936), pp. 438-492.
- Dresslar, F.B. "Suggestions On the Psychology of Superstition." American Journal of Insanity. (October, 1910), pp.213-226.
- Dressman, Denny. "Swimmer Brian Job's Trials More Reality Than Biblical." Amateur Athlete. XLI, 7 (July, 1970), pp.12-13.
- Dudycha, G.J. "The Superstitious Beliefs of College Students." Journal of Abnormal and Social Psychology. XXVII, 4 (January-March, 1933), pp. 457-464.
- Emme, Earle E. "Modification and Origin of Certain Beliefs In Superstition Among College Students." Journal of Psychology. X (October, 1940), pp. 279-291.
- _____. "Supplementary Study of Superstitious Beliefs Among College Students." Journal of Psychology. XII (October, 1941), pp.183-184.
- Fenton, N., and Lehman, H.C. "The Prevalence of Certain Misconceptions and Superstitions Among College Students Before and After a Course in Psychology." Education. L (April, 1929), pp. 485-494.
- Fisher, T.R., and Garrett, H.E. "The Prevalence of Certain Popular Misconceptions." Journal of Psychology. X, 4, 1926, pp.411-420.

- Gildea, William. "Time Stands Still At 1:07.6" Amateur Athlete. XLI, 7 (July, 1970), pp.32-33.
- Gilliland, A.R. "A Study of the Superstitions of College Students." Journal of Abnormal and Social Psychology. XXIV, 4 (January-March, 1930), pp. 473-479.
- Graubard, Mark. "Some Contemporary Observations on Ancient Superstitions." Journal of American Folklore. LIX, 232 (April-June, 1946), pp.124-133.
- Greenspan, Israel, and Peatman, John Gray. "An Analysis of Results Obtained from a Questionnaire on Superstitious Beliefs of Elementary School Children." Journal of Abnormal and Social Psychology. XXX, 4 (January-March, 1936), pp.502-507.
- Gresky, Alan T. "Science or Superstition?" Journal of Chemical Education. XLVII, 12 (December, 1970), pp.794-795.
- Harter, Richard S. "The Effects of Training Upon the Belief in Certain Popular Misconceptions." Journal of Applied Psychology. XXI, 1 (February, 1937), pp. 119-129.
- Kennedy, J.L. "Changes in Attitude Toward Telepathy and Clairvoyance During A 25 Year Period." Psychological Bulletin. XXXVI, 8 (October, 1939), pp. 649-650.
- King, Paul. "Man O'War." Canadian Magazine, December 11, 1971, pp.10-14.
- Lesser, Alexander. "Superstition." Journal of Philosophy. XXXVIII (November, 1931), pp. 17-28.
- Levitt, Eugene E. "Superstitions: Twenty-Five Years Ago and Today." American Journal of Psychology. LXV, 3 (July, 1952), pp.443-449.
- Ludeen, G.E., and Maller, J.B. "Sources of Superstitious Beliefs." Journal of Educational Research. XXVI, 5 (January, 1932), pp.321-343.
- _____. "Superstition and Emotional Maladjustment." Journal of Educational Research. XXVII, 8 (April, 1934), pp.592-617.
- McCartney, Eugene S. "The Superstition About Literal and Figurative Separation of Persons." Classical Journal. XIV, 4 (January, 1950), pp.233-235.
- McRae, Earl. "A Batboy Knows About Ritual, Superstition, Chewing Tobacco." Canadian Magazine, June 17, 1972, pp. 24-28.
- Nixon, H. K. "Popular Answers to Some Psychological Questions." American Journal of Psychology. XXXVI, 1925, pp. 418-423.
- Peters, I. L. "Superstitions Among American Girls." Ped. Sem. XXIII (December, 1916), pp. 445-451.
- Pritchard, Gillian. "13 The Loneliest Number of Them All." Weekend Magazine, October 7, 1972, p. 14.

"Series of Superstitions." Time, October 26, 1970, p. 15.

Sutton-Smith, B., and Rosenberg, R. G. "Sixty Years of Historical Change in the Game Preferences of American Children." Journal of American Folklore. 74, 1961, pp. 17-46.

Ter Keurst, A. J. "Comparative Difference Between Superstitious and Non Superstitious Children." Journal of Experimental Education. VII, 1939, pp. 261-267.

"The Athlete As Peacock." Time, January 4, 1971, pp. 51-57.

Tower, Whitney. "A Command Performance." Sports Illustrated. XXXII, 19(May, 1970), pp. 4-5.

Valentine, W. L. "Common Misconceptions of College Students." Journal of Applied Psychology. XX, 6 (December, 1936), pp. 633-658.

Wagner, M. E. "Superstitions and Their Social and Psychological Correlatives Among Students." Journal of Educational Sociology. II, 1 (September, 1928), pp. 26-36.

Weiskopf, Herman, "Be a Take-Charge Blaster." Sports Illustrated. XXXII, 14 (April, 1970), pp. 34-42.

Wright, Ern. "Derogating the Search of Glory." World Sports. XXXVI, 8 (August, 1970), pp. 25-27.

Zapf, R. M. "Superstitions of Junior High School Pupils. II. Effect of Instruction on Superstitious Beliefs." Journal of Educational Research. XXXI, 7 (March, 1938), pp. 481-496.

_____. "Relationship Between Belief In Superstitions and Other Factors." Journal of Educational Research. XXXVIII, 8 (April, 1945), pp. 561-579.

NEWSPAPER ARTICLES

Globe and Mail. "Steen's Curling Game Quite as Impressive as Mustache, Sideburns." December 11, 1971. p. 39.

London Evening Free Press. "Correlations Found In Planet Positions, Birth of Great Men." October 25, 1971. p. 9.

_____. "Woman Sweeps Winner Plays It Cool." November 29, 1971. p. 3.

_____. "Its No Time For Knights To Change." January 10, 1972. p. 10.

_____. "Hopes of Gold Dim for Karen." February 5, 1972. p. 13.