

**MULTIPLE MEDALLISTS AND TYPE OF EVENTS  
(MUNICH OLYMPIAD 1972)**

T. KHOSLA, Ph.D.

*Department of Medical Statistics, The Welsh National School of Medicine,  
Heath Park, Cardiff. CF4 4XN. U.K.*

Many factors, physiological, psychological, skill, training, motivation along with the right physique for the event, form a chain of essential criteria for the ultimate position of a medallist's standing. Because physique is related to the type of event, it follows that a particular physique is ideal for those specific events in which multiple medallists are found. Some events are incompatible; champion boxers cannot become champion wrestlers or weightlifters because of differences in their physique (Khosla 1968). Furthermore, a champion boxer is unlikely to win more than one medal as he is permitted to compete only in his weight grouping or above. In some team events (basketball, volley ball, football, hockey etc.) it is theoretically possible for the competitor to achieve excellence in more than one game. It is therefore of interest to identify the group of specific events in which multiple achievements are usually attained.

#### DATA

The data on Olympic finalists are derived from three volumes published by the organising committee for the Games of the XXth Olympiad, Munich 1972. The number of finalists included in the investigation differs according to the event (4 finalists in boxing, wrestling etc. to 30 in coxed fours rowing). In this investigation those persons have been included whose names appear in the final events after earlier elimination in heats. Relay events have not been included to avoid multiple entries of the same competitor. Despite this restriction, the number of male finalists, 1242, corresponds to 1171 individual competitors, as 49 of them are entered two or more times in the finals of different events (Table I). Similarly the table shows that of 259 females, 42 were listed in the finals of two or more events.

#### RESULTS

Among 64 finalists from eight running events (Table II) (100m, 200m, 400m, 800m, 1500m, 5000m, 10,000m and marathon) six runners had placings in the finals of more than one running event, and three (4.7%) were multiple medallists. The table shows that multiple medallist status is found within three major groups of specific events (percentage of multiple medallists amongst finalists:— running 4.7%, gymnastics 16.7%, swimming and diving 7.7%). Of the 20 male multiple medallists, only three were found in other events

**TABLE I**  
**Distribution of Persons and Finalists by  
Number of Events (Munich 1972)**

No. of Events	Male Persons	Finalists	Female Persons	Finalists
1	1122	1122	217	217
2	37	74	30	60
3	6	18	8	24
4	4	16	3	12
5	—	—	1	5
6	2	12	—	—
TOTAL	1171	1242	259	318

(wrestling, judo, canoeing\*). The results on 42 female multiple finalists show a similar trend with specific events from running (5 finalists), canoeing (2), gymnastics (7), swimming (27), other (1) (Long Jump and Pentathlon) and 17 (94.4%) of the 18 multiple medallists were found in running, gymnastics and swimming events.

#### DISCUSSION

Archery is a single event and multiple finalists are impossible; but it is conceivable for a champion archer to become a champion in pistol or rifle shooting. Table II shows that in a large majority of events multiple achievements are non-existent. The figure shows the combinations of specific events in which multiple medallist status is attained within running, gymnastics and swimming events for both males and females.

Some events are very similar in nature, for example, in the 100m and 200m events it is not unusual to observe the same person winning two gold medals (Hahn 1904, Craig 1912, Williams 1928, Tolan 1932, Owens 1936\*, Morrow 1956, Borzov 1972 and Steicher (female) 1972), quoted in a Time-Life publication, 1968. So far no champion has won in both the 200m and 400m events although in terms of physique, the

\*Heavyweight Graeco Roman and Free Style wrestling. Heavyweight and open Judo.

\*Owens, 1936 (gold medals in 100m, 200m and long jump; combination of dual achievements in sprinting and long jump is unique.

**TABLE II**  
**Distribution of Finalists, Multiple Finalists and Multiple**  
**Medallists in Broad Category of Events (Munich 1972)**

MALES				
Category	No. of events	No. of Finalists	No. of Multiple Finalists	No. of Multiple Medallists
1. Archery	1	8	—	—
2. Athletics				
(i) Running	8	64	6	3 (4.7%)
(ii) Walking	2	16	1	—
(iii) Hurdling				
Throwing	12	95	—	—
Jumping				
3. Team Events				
Basketball,				
H. Ball, V. Ball,				
F. Ball, Hockey,	6	263	—	—
Waterpolo				
4. Boxing	11	44	—	—
Weightlifting	9	72	—	—
Wrestling F.S.	10	41	1	1 (1.2%)
Wrestling G.R.	10	40		
Judo	6	24	1	1 (4.2%)
5. Canoeing	8	106	2	1 (0.9%)
6. Cycling	6	46	1	—
7. Equestrian	3	24	—	—
8. Fencing	3	18	—	—
9. Gymnastics	6	36	9	6 (16.7%)
10. Rowing	7	129	—	—
11. Shooting	8	64	3	—
12. Swimming & Diving	13	104	25	8 (7.7%)*
13. Yachting	6	48	—	—
<b>TOTAL:</b>	<b>135</b>	<b>1242</b>	<b>49</b>	<b>20</b>

contestants in these two events are undifferentiated (Khosla, 1974). It appears that regulations in the eliminating heats do not permit the same competitor to participate in the 200m and 400m run.

Although the long distance events, 5,000m, 10,000m and marathon, are different in the absolute sense, the same person is capable of winning two or more long distance events (Hannes 1912, 1920; Paavao 1920, 1924, 1928; Villes 1924, 1928; Zatopek 1952; Keino, Temmu, Gammoudi, Wolde in 1968; Viren in 1972). In the Olympics, there is no event longer than the marathon, but about twice this distance (Comrades marathon) is run each year in South Africa. Man's endurance in running goes far beyond the marathon, and even 24 hour races are held.

Eight individual swimming events are listed for males up to 1964 (100m, 400m, 1500m F.S., 100m back,

200m butterfly, 200m breast stroke; spring and high dive). Daniels (1904), Weissmuller (1934) and Scholander (1964) won medals in both the 100 and 400m free style events. Apparently six additional swimming events were introduced in 1968 (200m F.S., 200m breast, 100m butterfly, 200m back, 200 and 400m medley) to make a total of 14 individual events for males.

Some of the existing gymnastic and running events, and the recently introduced swimming events do not appear to pose new challenges because of great similarity between them.

#### ACKNOWLEDGEMENT

I am indebted to Mr. P. Samuel for his help in computer programming.



**REFERENCES**

- KHOSLA, T., 1968. Unfairness of Certain Events in the Olympic Games, *British Medical Journal* **4**, 111.  
The Olympic Games 1968 (p. 86-105; 111-117), Time Life Books, New York.
- KHOSLA, T., 1974. Relationship Between Speed of Running and Distance Run, *Lancet* **1**, p. 30.
-