

Analysis of Predicted Medal Tally and Comparision of Performances of Indian Weightlifters of Commonwealth Games 2010 & 2014

Snehangshu Biswas¹, Dr. Rajdeep Kaur Talwar², Tambi Medabala³, Dr. Neha Kakkar⁴

ABSTRACT

The purpose of this study was to compare the performances of the Indian Weightlifters (both men and women) participated in the CWG-2014, Glasgow, with the performances of CWG-2010 medallists of different weight categories. The analysis regarding medal possibility as predicted on the basis of their trial performance was also evaluated. The performances of 14 Indian Weightlifters were collected from the CWG-2014, Glasgow, website and compared with performances of Gold, Silver and Bronze medallists of CWG-2010. The medal tally of Indian weightlifters of 2014 CWG were compared with the predicted medal possibility and was observed that about 92% of the predicted medal possibility was achieved by the Indian weightlifters in 2014 CWG. However, in some categories the weight lifted by the weightlifters of 2014 CWG was lower than the medallists of CWG-2010.

As per analysis, it has been found that the high altitude training, through which the weightlifters of CWG-2014 got benefitted, can be beneficial for strength and power training especially for better conditioning. By analysing the performance, it can be suggested that the increase in the number of participants in each weight category may increase the possibility of number of medals.

1. JSA, Department of Physiology, FOSS, NS NIS, Patiala;

2. DEAN, FOSS, NS NIS, Patiala;

3. JSO, Department of Physiology, FOSS, NS NIS, Patiala;

4. SA, Department of Physiology, FOSS, NS NIS, Patiala

KEYWORDS

Snatch; Clean and jerk; Medal possibility; Trial; CWG-2010; CWG-2014.

INTRODUCTION

The sport of Weightlifting is the most dynamic strength and power sport, in the sporting world. In this, two whole body lifts are performed in competition: the snatch and clean & jerk.

Snatch- The contestant picks up the weight in the continuous movement and lifts it as high as possible.

Clean & jerk - The weight is lifted from the floor rested against the chest and then lifted as high as possible upon the call from the referee.

The two competition lifts in order are the snatch and the clean & jerk. Each weightlifter receives three attempts in each, and the combined total of the highest of both the successful lifts determines the overall results, within a bodyweight category. Body weight categories are different for women and men. A lifter who fails to complete at least one successful snatch and one successful clean & jerk also fails to total, and therefore, receives an incomplete entry for the competition.

Various literature have explained that Weightlifting generates some of the greatest levels of power (W) measured in sports. The distinctive combination of muscular strength, muscular power, flexibility, kinesthetic awareness and lifting technique is necessary for successful Weightlifting performances. Not only this, the performance may also depends upon some

other physiological / psychological factors. The co-ordination of all these factors results in a unique performance. The purpose of this study was to compare the performances of the Indian weightlifters (both men and women) who participated in the CWG-2014 with the performances of CWG-2010 medallists of different weight categories and analyze the medal possibility predicted on the basis of their trial performance.

METHODOLOGY

Fourteen Indian weightlifters of 10 different weight categories (6 categories for men and 4 categories for women) were selected for the CWG-2014, Glasgow, on the basis of their Trial performance. The performances of these weightlifters were compared with the medallists' performances of each weight categories of the CWG-2010, New Delhi; and the medal possibility was predicted. After the completion of Commonwealth Games, 2014, at Glasgow, the performances and results of Indian Weightlifters at CWG-2014 were collected from the CWG, 2014, Glasgow, website and compared with predicted medal Tally and with the performances of the medallists of CWG, 2010, for each weight Category, to determine which performance variables of Indian weightlifters was different from the Trials of CWG 2014, and CWG 2014, and also from the performances of the medallists of CWG 2010 (Table 1)

RESULTS & DISCUSSION

The performances of Indian weightlifters, both men and women; of various weight categories which competed at the Commonwealth Games-2014 are analysed and represented as follows –

Men : 56 kg weight category

On the basis of Gold, Silver and Bronze medallists' performances at the CWG-2010, it was predicted that there was less possibility of getting Gold medal in this weight category but more possibility of getting Silver and Bronze medal by the Indian weightlifters. However, one of the weightlifters dominated the field and grabbed the Gold medal and another has bagged the Bronze medal at the CWG-2014, Glasgow. It is observed that the weight lifted by the Indian medallists is less than the CWG-2010 medallists in this category. The

Gold medallist lifted 248 Kg that was 9 Kg less than the Gold medallist of CWG-2010 and 6 Kg less than his own performance at the Trials. Almost same result is observed for the Silver medallist. He also lifted 4 Kg less than the CWG-2010 bronze medallist and 3 Kg less than his Trials performance (Fig - 1).

Men : 62 Kg weight category

It was predicted that there was very less possibility of getting any medal in this weight category as the selected Indian weightlifter lifted 267 Kg at his Trial which was 9 Kg, 8 Kg and 5 Kg less than the performance of the Gold, Silver and Bronze medallists, respectively, of the CWG-2010, in the same body weight category. The lifter managed to lift 263 Kg at the CWG-2014, Glasgow, which is 4 Kg less than his own Trial performance and positioned 7th at the CWG-2014.(Fig-2)

Table-1 : Performances of the Indian Weightlifters at CWG-2014 and their predicted medal possibility on the basis of the performances of the medallists of CWG-2010

Weight Category	Weightlifters	Weight lifted at CWG-2014 Trials (KG)			Weight lifted at CWG-2014, Glasgow (KG)			Weight lifted by different medallists at CWG-2010, New Delhi		Medal Possibility predicted before CWG-2014, Glasgow	Position/ Medal grabbed at CWG-2014
		Snatch	Clean & Jerk	Total	Snatch	Clean & Jerk	Total	Medal	Lifted weight (KG)		
56 Kg (Men)	Weightlifter 1	112	142	254	109	139	248	Gold	257	Less	Gold
	Weightlifter 2	110	137	247	111	133	244	Silver	252	More	
62 Kg (Men)	Weightlifter 1	115	152	267	118	145	263	Bronze	248	More	Bronze
								Gold	276	Less	7 th
69 Kg (Men)	Weightlifter 1	137	159	296	136	160	296	Silver	275	Less	
								Bronze	272	Less	
77 Kg (Men)	Weightlifter 1	143	182	325	149	179	328	Gold	321	Less	Bronze
								Silver	308	Less	
85 Kg (Men)	Weightlifter 1	149	182	331	150	183	333	Bronze	306	Less	
								Gold	333	Less	Gold
94 Kg (Men)	Weightlifter 1	151	186	337	150	188	338	Silver	308	More	
								Bronze	297	More	Silver
48 Kg (Women)	Weightlifter 1	77	97	174	77	96	173	Gold	333	Less	
								Silver	331	More	Bronze
53 Kg (Women)	Weightlifter 1	80	104	184	83	105	188	Bronze	325	More	
								Gold	334	More	Gold
58 Kg (Women)	Weightlifter 1	83	117	200	83	111	194	Silver	333	More	
								Bronze	332	More	Silver
63 Kg (Women)	Weightlifter 1	87	118	205	88	114	202	Gold	175	Perhaps Less	Gold
	Weightlifter 2	94	111	205	91	107	198	Silver	167	More	Silver
								Bronze	165	More	
53 Kg (Women)	Weightlifter 1	80	104	184	83	105	188	Gold	182	More	Bronze
								Silver	180	More	
58 Kg (Women)	Weightlifter 1	83	117	200	83	111	194	Bronze	175	More	
								Gold	197	More	5 th
63 Kg (Women)	Weightlifter 1	87	118	205	88	114	202	Silver	192	More	
	Weightlifter 2	94	111	205	91	107	198	Bronze	188	More	
								Gold	211	Less	Bronze
63 Kg (Women)	Weightlifter 2	94	111	205	91	107	198	Silver	202	More	4 th
								Bronze	198	More	

Men : 69 Kg Weight Category

There was less possibility of getting any medal in this category as the selected weightlifter lifted 296 Kg at his Trials which was 25 Kg less than the Gold medallist, 12Kg less than Silver medallist and 10 Kg less than the Bronze medallist of CWG-2010. But, he performed his best and bagged the Bronze medal at 296 Kg, the same weight he lifted at his trials (Fig-3).

Men : 77 Kg Weight Category

In respect of the performances of the CWG-2010 medallists, it was predicted that the possibility of Gold medal is less in this weight category but there was more possibility of getting Silver and Bronze medal. But, one competitor could manage to get the Gold medal by lifting 328 Kg. By lifting that weight, he proved that additional weight can be lifted at such a competition level. He lifted 3 Kg more than his trial performance. Instead of such a performance, he was not able to reach the level of Gold medallist of CWG-2010 (333Kg); 5 Kg less. The Silver medallist, another Indian weightlifter, lifted 317 Kg. Although it was 8 Kg less than his own performance at the Trials (325 Kg) but it was 9 Kg more than the Silver medallist of CWG-2010 (Fig-4).

Men : 85 Kg Weight Category

By comparing the performances of medallists of CWG-2010 with the Trial performance of the Indian weightlifters of this category, it was predicted that he could get either a Silver or a Bronze medal at CWG-2014, Glasgow. At the Trial he lifted 331 Kg but at the CWG-2014, Glasgow, he lifted 333 Kg which is 2 Kg more than his trial performance and thus he got the Silver medal (Fig-5).

Men : 94 Kg Weight Category

It was predicted that there is more possibility of getting a medal, including Gold, in this weight category as he lifted 337 Kg at his Trial which was 3 Kg, 4 Kg and 5 Kg more than the performance of the Gold, Silver and Bronze medallists, respectively, of the CWG-2010, in the same body weight category. But, it was found that the competition became so tough and the Gold medallist and Silver medallist lifted 349 Kg each, which was 15 Kg more than the Gold medallist of CWG-2010. The Indian weightlifter also enhanced his performance by lifting 1 Kg more than his Trial performance and could manage to bag the Bronze medal (Fig-6).

Women : 48 Kg Weight Category

This is the category in which India has had much expectation. It was predicted that there is more possibility of getting Silver and Bronze by both the weightlifters, but the possibility of Gold medal was perhaps less. However, one of the weight lifters put her full effort and was able to get the Gold medal by lifting 173 Kg as compared to another weightlifter, who got the Silver medal by lifting 170 Kg. It is also observed that the Silver medallist lifted 4 Kg more than she had lifted at the Trial; whereas, the Gold medallist lifted 1 Kg and 2 Kg less than her Trial performance and CWG-2010 Gold medallist performance, respectively (Fig-7).

Women 53 Kg Weight Category

In this category the selected Indian weightlifter competed with her full efforts. It was predicted that one medal is sure for this category, by comparing the results of CWG-2010 medallists' performances; and the weightlifter has made that true. She

lifted 4 Kg more than the weight she lifted at Trial and 11 Kg more than the Bronze medallist of CWG-2010 (Fig- 8).

Women : 58 Kg Weight Category

It was predicted that the participants of this weight category would be able to manage atleast a medal in this weight category; but the competition was so tough that she was not able to get any medal. In her trial, she had managed to lift the weight of 200 Kg, which was 3 Kg, 8 Kg and 12 kg more than Gold, Silver and Bronze medallists, respectively. However, she could not reach that level, at the competition (Fig-9).

Women : 63 Kg Weight Category

On the basis of the CWG-2010 medallists' performances, it was predicted that there was a high possibility of getting Silver and Bronze medal by both the Indian weightlifters, in this weight category. Unfortunately, only one competitor was able to get the Bronze medal. It may be due to the high competition level in this category. Both the weightlifters lifted the same Kg of weight, at the trial; but at the competition, one weightlifter who was positioned 4th was able to lift 198 Kg, which was 7 Kg less than her trial. Whereas, another weightlifter lifted 202 Kg, just 2 kg, less than her trial performance was able to grab the Bronze medal (Fig- 10).

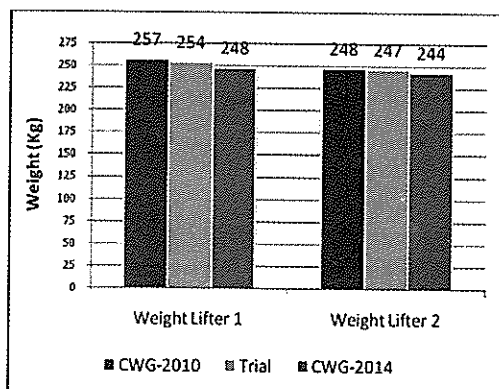


Fig- 1 : Men 56 Kg weight category

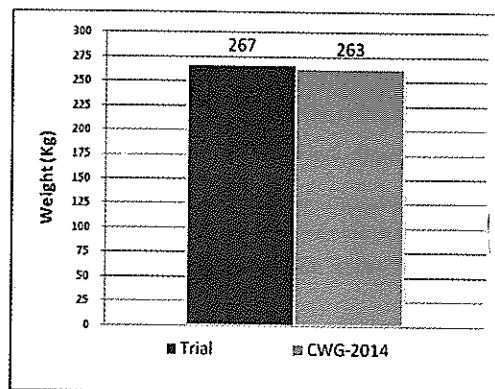


Fig- 2 : Men 62 Kg weight category

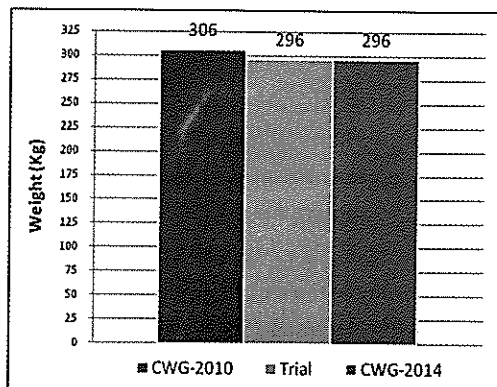


Fig- 3 : Men 69 Kg weight category

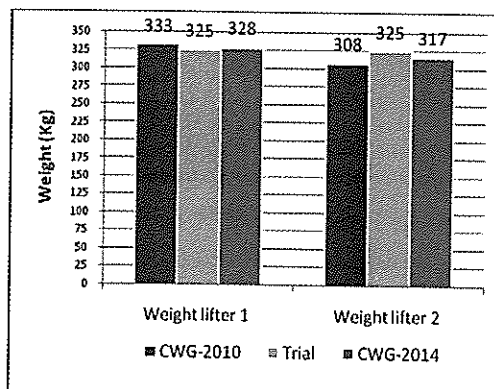


Fig- 4 : Men 77 Kg weight category

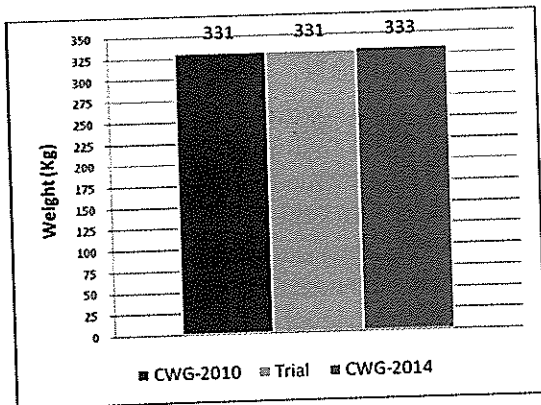


Fig- 5 : Men 85 Kg weight category

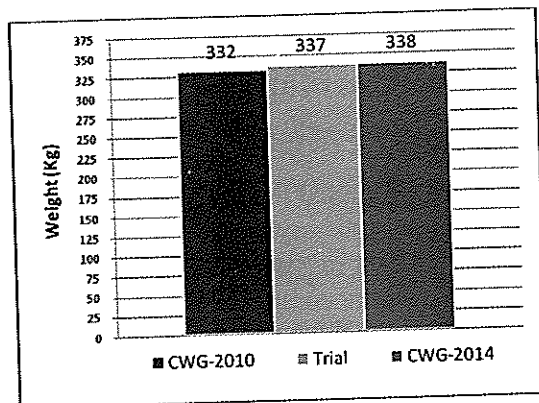


Fig- 6 : Men 94 Kg weight category

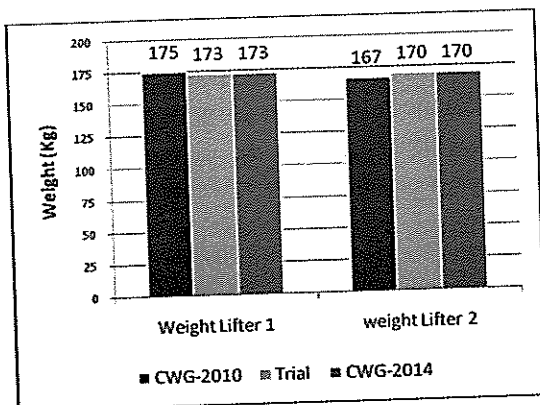


Fig- 7 : Women 48 Kg weight category

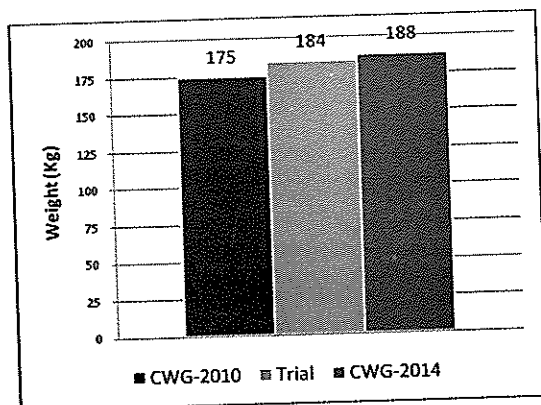


Fig- 8 : Women 53 Kg weight category

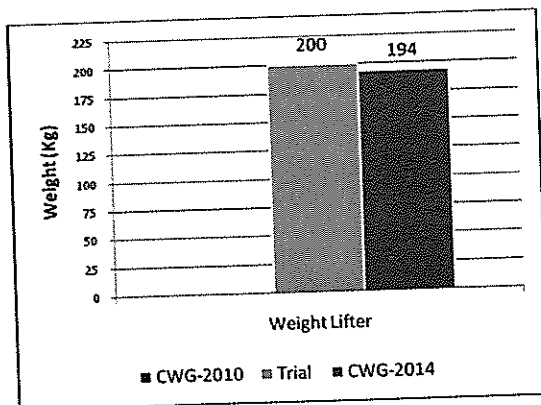


Fig- 9 : Women 58 Kg weight category

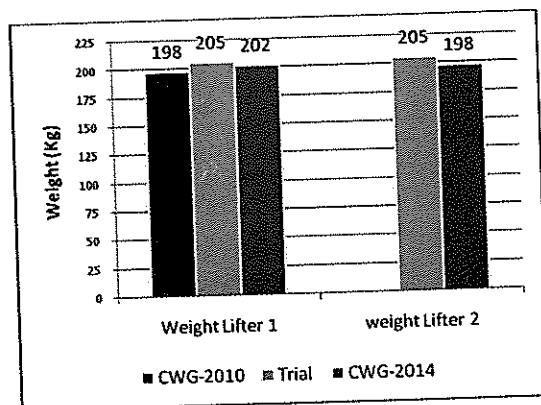


Fig- 10 : Women 63 Kg weight category

CONCLUSION

From the above observation it can be concluded that about 92% of the predicted medal tally was achieved by the Indian weightlifters, in the CWG-2014. Not only that, the category in which it was predicted that there was less possibility of getting Gold medal the Indian weightlifters performed their best and grabbed the Gold medal. It can also be concluded that the competition in women category was quite higher than the CWG-2010, New Delhi. The women competitors of each category lifted more weight than the medallists of CWG-2010; whereas, the men weightlifters lifted lesser weight than the medallists of the CWG-2010. It was also observed that the weight lifted by most of the Indian weightlifters, at the CWG-2014, was less than their individual performance of the Trial. However, the performances of the

weightlifters who lifted more weight than their individual performance of Trial cannot be ignored. It is also observed that there were eight competitors in four different weight categories i.e. two competitors in each category; and out of these eight competitors seven competitors were able to get the medals in all four different weight categories.

SUGGESTIONS

By analysing the performances of the Indian weightlifters at CWG-2014, Glasgow, it can be suggested that –

1. High altitude training, with periodical scientific analysis, can be provided to the weightlifters for better conditioning and enhancement of performance.
2. The more number of competitors, if available, in each category may increase the possibility of more medals.

REFERENCES

- Andrew C. Fry et al (2003).** Muscle Fiber Characteristics and Performance Correlates of Male Olympic-Style Weightlifters; *Journal of Strength and Conditioning Research*, 17(4), 746-754.
- C. Fry et al (2006).** Anthropometric and Performance Variables Discriminating Elite American Junior Men Weightlifters; *Andrew Journal of Strength and Conditioning Research*, 20(4), 861-866.
- Gonyea, W.J. & Sale, D. (1982).** Physiology of weight-lifting exercise; *Arch Phys Med Rehabil*; 63(5): 235-237.
- Lincoln E. Ford et al (2000).** Gender – and height – related limits of muscle strength in world weightlifting championships; *Journal of Applied Physiology*; 89; 1061-1064.
- Reiser et al (1996).** Science and Technology to Enhance Weightlifting Performance: The Olympic Program; *Strength and Conditioning Journal*; 18(4):43-51.
- Storey, A. & Smith, H.K. (2012).** Unique aspects of competitive weightlifting: performance, training and physiology; *Journal of Sports Medicine*; 42(9):769-790.
- Vizcaya F.J. et al (2009).** Could the deep squat jump predict weightlifting performance?; *Journal of Strength & Conditioning Research*, 23(3):729-34.