



## Impact of Early Specialisation on Junior Track and Field Athletes

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### Abstract

The purpose of the present study was to investigate the impact of early specialization on continuous participation of Junior Track and Field athletes in Kerala. Participants were ex junior Track and Field athletes from Kerala (N = 300, 150 boys and 150 girls) who have won medals minimum at the state level Athletics Championship. For collection of required data the investigators administered the self made questionnaire. For the purpose of analysis and interpretation of data descriptive statistics were used. The result of the study shows that early specialization in one particular event among junior Track and Field athletes leads to early sport dropout rather than yielding positive output.

**Key words:-** Drop out, Withdrawal, Junior athlete, Early specialization



## Introduction

“Many programs are promoting children to begin structured sports involvement at an advanced age, to concentrate in just one sport from a relatively early age and to engage in a large volume of training for this sport on a year round basis. This approach has been commonly termed as Early Specialization”. Wiersma,(2000), J Fraser Thomas et.al, (2008). Recent trends in junior sports development programs still promote early talent detection, early specialization, eclecticism and institutionalization. (Weirsma, 2000; Cote, et.al, 2009; Capranica & Millard – Staffard, 2011; De Crook, 2011). “With scholarships, professional contracts and sporting goods industry stakeholders, children specialize in one sport earlier and earlier”. (Malina, 2010). This trend is because of the widespread belief of coaches, sports management professionals, athletes and parents that the best way to promote athletic talents is to engage one in any sport at an early age and make them practice the particular sport all the time (Malina, 2010). “Labelling young kids as promising youngsters, prodigies and talents, naturally perpetuates their specialization and puts more pressure and expectation and often results in more dropout than elite performance”. (Wiersma, 2000; Gullich and Emrich,2006; Wall and Cote, 2007; Fraser Thomas et.al, 2008). As noted by Malina (2010), the widespread belief in early sport specialization has its roots in perceived effectiveness of USSR and Eastern European talent development programs. This idea was then spread around the world by popular media, carving the belief of the coaches and other sports management groups who are concerned with youth sports development. As a result youth sports became more professionalised with early involvement and early specialization.

Recent literature underlines the developmental disadvantages and dangers associated with early specialization more strongly than ever. Researchers pointed out as many ill effects connected with early specialization and increased volume of early deliberate practice. (Wiersma, 2000; Malina, 2010). The most frequently cited risks associated with early specialization includes (i) limitation in overall development (ii) Higher injury prevalence (iii) increased dropout rates and (iv) disinterest in continuation of sports activity (Gould, Udry, Tuffey & Loehr, 1996; Baker, 2003; Wall & Cote, 2007; Baker et.al, 2009; Malina, 2010). Moreover the physical costs associated with early specialization are deliberately high. The athletes who specialized early in their sport suffer from more injuries and they are particularly prone to overuse injuries (Malina, 2010; Baker 2003). Finally athletes



who started specialized training earlier in one sport often experience more stress, negative performance evaluation, overtraining and lack of social support. As a result they are more prone to burnout or dropout from further sports participation. (Gould et.al, 1996; Baker, 2003; Weirsmas, 2000; Malina, 2010). It is found that early specialisation is apt for a sport like gymnastics in which elite performance is yielded by an athlete at an early age. But for a sport like Athletics in which elite performance is always achieved by an athlete in his or her late twenties, early specialisation is found to be a curse rather than that of a blessing.

### **Methods And Materials**

This is a longitudinal study focussing on the impact of early specialization on junior Track and Field athletes, who have started specialised Athletics training at an early age. Moreover the present study evaluates whether early sport specialisation promotes smooth transfer of junior athletes from junior to the elite senior level or early sport specialisation leads to early sport dropout.

### **Participants**

The participants selected for the study were junior track and field athletes from Kerala state who quit Athletics after achieving a podium finish minimum at the State Athletics Championship during the period 1990-2014. The lists of participants were selected after the careful analysis of the records and results collected from the websites and office of Kerala state Athletics Association and Director of Public Instruction Kerala. The subjects were 300 dropouts (150 male and 150 female) were Ex Junior Track and Field athletes.

### **Inclusion and Exclusion Criteria**

Participants for the present study were recruited based on the following inclusion criteria –

- i. Junior Track and Field athletes who quit competitive Athletics after achieving a podium finish at least at the State level Athletics championship.
- ii. The age of the dropouts fixed at the 13-19 years range at the time of their withdrawal from competitive Athletics.
- iii. Only athletes who hail from Kerala state were selected for the study.



- iv. Final criteria was fixing the period selected for the study, i.e, 1990-2014. The junior athletes who dropped out during this time period were included in the study.

The dropped out athletes who didn't fulfill the above criteria were excluded from the present study.

### **Methods Used For Collection of Data**

The survey method adopting a self made questionnaire was used to gather the appropriate data from ex junior track and field athletes from Kerala State. The investigator made a personal contact with the subjects through telephonic conversation to fix an appointment with them for a face to face interview to obtain the relevant data. The investigator wanted to collect the data from the respondents with a face to face interview which may fetch maximum involvement of the respondents and thus availing relevant information regarding the impact of early specialization on early sports dropout.

### **Methods Used For Analyzing the Data**

For the purpose of analysis and interpretation of data descriptive statistics were used. The data obtained from the questionnaire survey from the respondents were carefully classified and tabulated for the statistical analysis. Frequency and percentage were computed to find out the mean age at which the athletes started their specialized Athletics training and the mean years of active involvement

### **ANALYSIS OF DATA**

Table No. 01 indicates the Mean age of sub sample and total sample with respect to the age at which the dropout athletes started the specialized Athletics training.

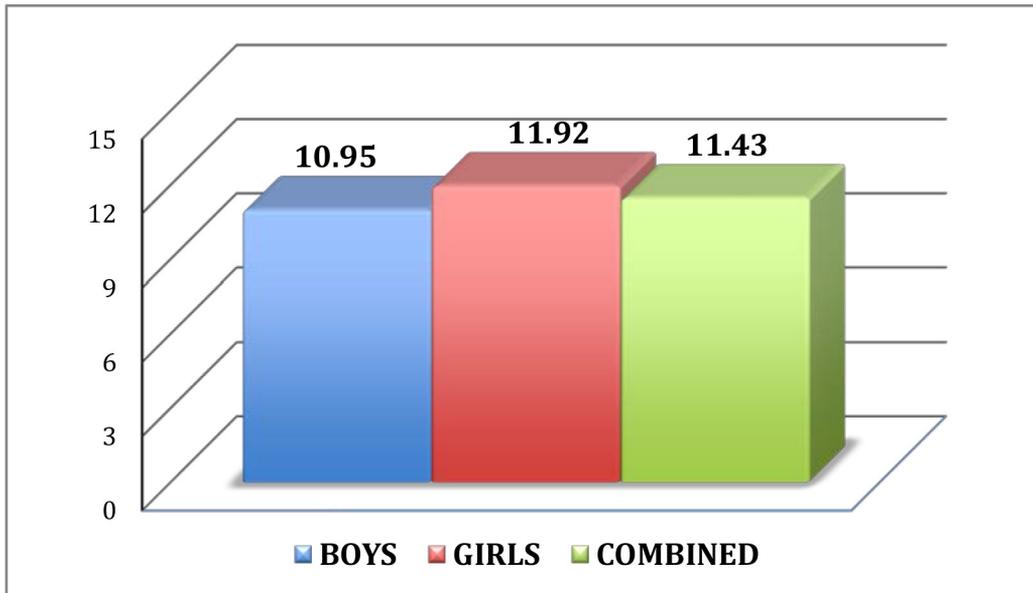
TABLE No. 01

	<b>BOYS</b>	<b>GIRLS</b>	<b>COMBINED</b>
<b>MEAN AGE</b>	<b>10.95</b>	<b>11.92</b>	<b>11.43</b>

Source: Primary Survey Data 2019



From table No.01 it is very evident that the mean age of dropout athletes who started the specialized Athletics training among dropout boys are lower than that of the girls. The table also reveals that the mean age at which the dropout athletes began their specialized coaching in Track and Field among boys, girls and combined group stood at below 12 years, which clearly indicate the early specialization of the dropout athletes. It is also very clear from the table that boys started specialized training earlier than the girls



**Figure No. 01** exhibits the Graphical representation of Mean age with respect to the age at which the dropouts started the specialized Athletics coaching.

Table No. 02 exhibits the Mean years of active involvement of sub sample and total sample in competitive Athletics

	<b>BOYS</b>	<b>GIRLS</b>	<b>COMBINED</b>
<b>Mean years of active involvement</b>	<b>5.29</b>	<b>6.02</b>	<b>5.65</b>

Source: Primary Survey Data 2019



Table No. 02 tells us about the average year of active involvement of dropout athletes before they put an end to their athletics career, after they began their specialized coaching in Track and Field events. From the table it is very clear that the dropout girl athletes had a longer stay compared to their male counterparts. This indicates that the boys dropout faster than that of girls from competitive Athletics.

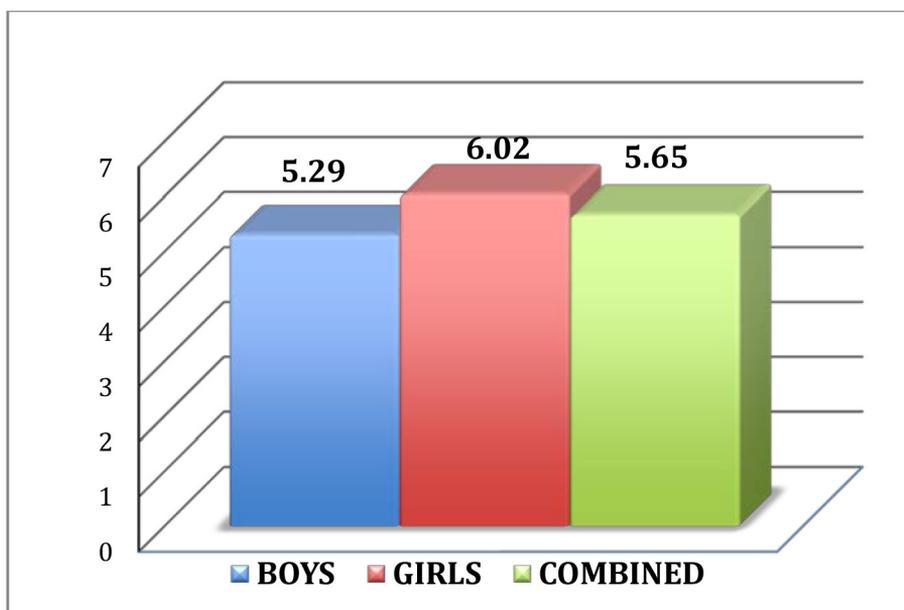


Figure No.02 shows the Graphical representation of Mean year with respect to the years of active involvement of total sample and sub samples in competitive Athletics.

Table No. 03 illustrates the Mean dropout age of total sample and subsample

CATEGORY	MEAN DROPOUT AGE
BOYS	16.29
GIRLS	17.75
COMBINED	17.02

Source: Primary Survey Data 2019



Table No. 03 illustrates a clear picture about the dropout age of athletes who have terminated their athletics career. It is evident from the table that the mean dropout age of the dropout boys is lower than that of the girl dropouts. Among boys the dropout is highest when they are at the earlier part of 16 years of age and among girls dropout is highest when the girls are at the later part of 17 years of age. This data clearly reveals the fact that the male athletes dropout earlier than female athletes

Graphical representation of Mean dropout age of total sample and subsamples are depicted in figure No. 3

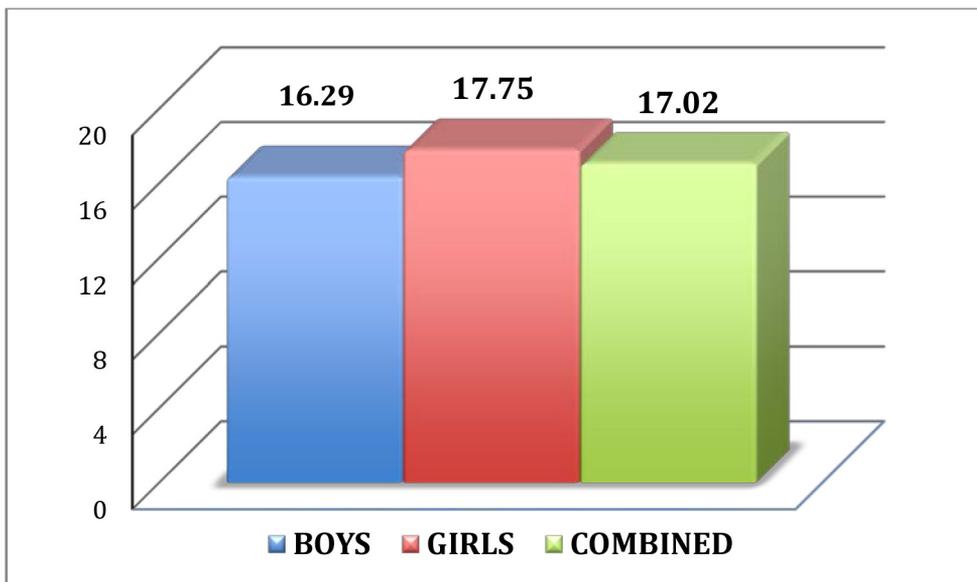


FIGURE No. 3

### Findings and Conclusion

Based on the analysis of the data the following findings and conclusion can be drawn.

- The mean age at which the boys began their specialized training in Athletics events is 10.95 years and among girls it is 11.92; which clearly indicates early specialization among junior Track and Field athletes in Kerala.



- Boys began specialized Athletics training in a particular event earlier than the girls.
- The mean years of active involvement in competitive Athletics among boys is found to be 5.29 while among girls it is 6.02 years.
- The analysis of the data shows that among the boys the dropout rate is highest when they are usually in the beginning of 16 years and among girls the dropout rate is highest when the girls are in the latter half of 17 years of age.

## Conclusion

As per the analysis of the results of the study it is concluded that early specialization in one particular event among junior Track and Field athletes leads to early sport dropout rather than yielding positive output.

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