



***RICERCA SCIENTIFICA E DANZA SPORTIVA:
LA PRESTAZIONE ATLETICA DI ALTO LIVELLO
Roma, 20 gennaio 2014***

Considerazioni iniziali.....

PROGRAMMA

Promozione ed
avviamento
Sport nella scuola

Crescita delle
figure
professionali
che operano
nel Sistema

**CAPIACITÀ DI INTERVENTO DI UN
SISTEMA SPORTIVO
ORGANIZZATO**

Sport per tutti
e per tutte
età

Prevenzione,
mantenimento
dell'efficienza fisica
e della salute



LINEE OPERATIVE

Fornire un
contributo alla
**PROGRAMMAZIONE
FEDERALE**

Sezione medica

Commissione
medica

RICERCHE FISIOLOGICHE

Sezione culturale

Sezione valutazione
funzionale e training

FORMAZIONE



Siamo partiti
dall'analisi della
Letteratura
scientifica



A Bibliographic Review of Medicine and Science Research in DanceSport

Teri Riding McCabe, MS, ATC, Matthew Wyon, PhD, Jatin P. Ambegaonkar, PhD, ATC,
and Emma Redding, PhD

Med Probl Perform Art 2013; 28(2):70–79.

Potentially relevant publications identified and screened
 $n=48,900$

Articles critical reviewed
 $n=39$

Excluded due to language (Italian and German)
 $n=5$

Admissible articles $n=34$

Topic areas:

Participant motives $n=3$

Psychology $n=3$

Exercise physiology $n=8$

Fitness training $n=8$

Injury and injury prevention $n=6$

Biomechanics $n=2$

Menstrual dysfunction $n=1$

Substance use $n=3$

Anthropometry, Somatotypes, and Aerobic Power in Ballet, Contemporary Dance, and DanceSport

Helena Liiv, PhD,¹ Matthew A. Wyon, PhD,^{2,3} Toivo Jürimäe, PhD,¹ Meeli Saar, PhD,¹

Jarek Mäestu, PhD,¹ and Jaak Jürimäe, PhD¹

Med Probl Perform Art 2013; 28(4):207–211.⁵

There was a significant difference in $\text{VO}_{2\text{max}}$ values between three dance styles ($f_{2,112} = 33.724$, $p < 0.001$), and post hoc tests indicated $\text{VO}_{2\text{max}}$ values of dancesport dancers were significantly higher ($p < 0.01$) (Table 2).

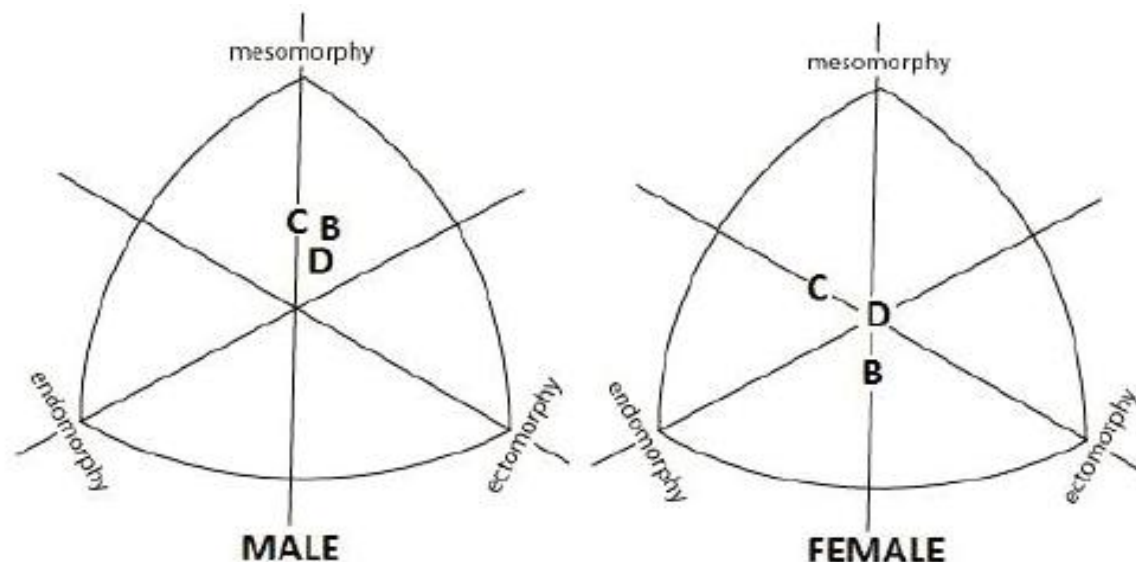


FIGURE 1. Mean somatotypes for male and female ballet (B), contemporary (C), and dancesport (D) dancers.

The Dancer as a Performing Athlete

Physiological Considerations

Yiannis Koutedakis^{1,2} and Athanasios Jamurtas²

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2 Department of Sport and Exercise Science, Thessaly University, Trikala, Greece

Given that performing dance itself elicits only limited stimuli for positive fitness adaptations, it is not surprising that professional dancers often demonstrate values similar to those obtained from healthy sedentary individuals of comparable age in key fitness-related parameters. In contrast, recent data on male and female dancers revealed that supplementary exercise training can lead to improvements of such fitness parameters and reduce incidents of dance injuries, without interfering with key artistic and aesthetic requirements. It seems, however, that strict

.....l'allenamento fisico non deve alterare la componente estetica ed artistica dei danzatori.....

THE EFFECTS OF THREE MONTHS OF AEROBIC AND STRENGTH TRAINING ON SELECTED PERFORMANCE- AND FITNESS-RELATED PARAMETERS IN MODERN DANCE STUDENTS

YIANNIS KOUTEDAKIS,^{1,2} HARMEL HUKAM,² GEORGE METSIOS,² ALAN NEVILL,² GIANNIS GIAKAS,¹ ATHANASIOS JAMURTAS,¹ AND LYNN MYSZKEWYCZ²

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TABLE 2. Dance test performance and fitness-related parameters in the exercise ($n = 19$) and control ($n = 13$) groups before and after a 3-month exercise training program. Values are mean (\pm SD).*

	Dance test (points)	$\dot{V}O_2\text{max}$ ($\text{ml}\cdot\text{kg}^{-1}\cdot\text{min}^{-1}$)	Skinfolds (mm)	Flexibility ($^\circ$)	Strength left and right leg (kg)
Exercise group (before)	73.9 (\pm 16.2)	50.7 (\pm 7.5)	39.4 (\pm 10.5)	125.5 (\pm 24.6)	90.6 (\pm 16.0)
Exercise group (after)	97.8 (\pm 11.8)	68.5 (\pm 8.1)	43.0 (\pm 10.3)	132.0 (\pm 21.2)	96.8 (\pm 11.2)
Difference (before/after)	5.8 (\pm 4.6)	-1.3 (\pm 2.8)	3.6 (\pm 10.3)	6.6 (\pm 5.2)	-11.2 (\pm 3.9)
Effect size	0.30	0.51	0.88	0.29	0.25
ANOVA (p value)	0.02	0.04	NS	0.01	0.001

* ANOVA = analysis of variance; NS = nonsignificant ($p > 0.05$).

Differenza 35% miglioramenti GRUPPO SPERIMENTALE
rispetto Differenza 6% nel GRUPPO CONTROLLO

EFFECTS OF PARTNER'S IMPROVISATIONAL RESISTANCE TRAINING ON DANCERS' MUSCULAR STRENGTH

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Figure 2. Abdominal curl was performed by 1 person in a supine position while the partner applied resistance on the supine person's shoulders. The supine lying person then lifted the head and shoulders off the ground in a curling motion.



Figure 6. Leg press was executed with 1 person lying in a supine position with flexed hip, feet toward the ceiling, while the partner placed resistance on the supine person's feet soles using the pelvic girdle region. The supine person then flexed and extended the knees, thus lifting the partner into the air.

..ricercare la stabilità
degli equilibri
dinamici.....



..mediante l'esercizio
instabile.....

Research Article

Balance, Sensorimotor, and Cognitive Performance in Long-Year Expert Senior Ballroom Dancers

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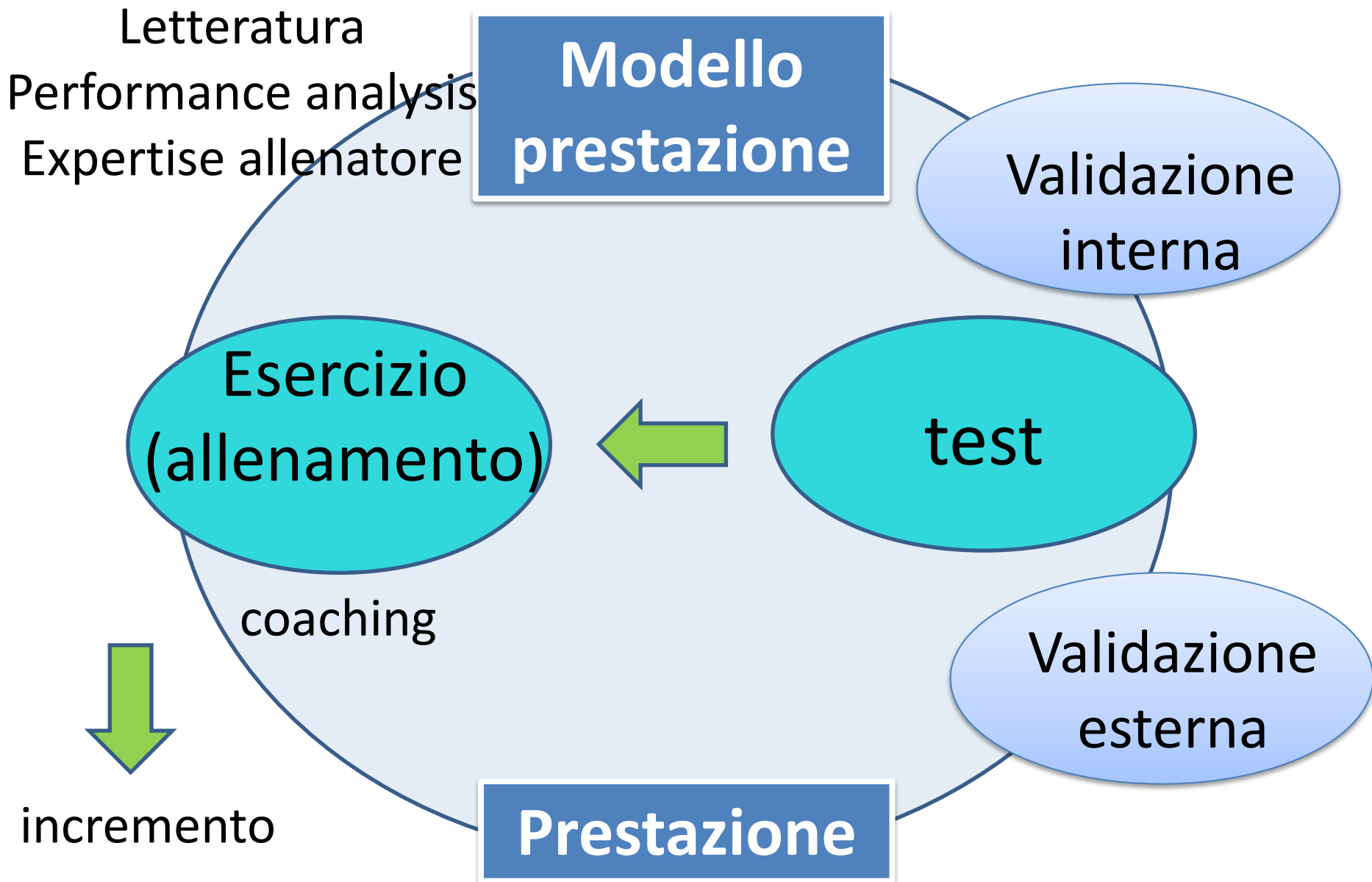
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Physical fitness is considered a major factor contributing to the maintenance of independent living and everyday competence. In line with this notion, it has been shown that several years of amateur dancing experience can exert beneficial effects not only on balance and posture but also on tactile, motor, and cognitive functions in older people. This raises the question of whether an even more extensive schedule of dancing, including competitive tournaments, would further enhance these positive effects. We therefore assessed posture, balance, and reaction times, as well as motor, tactile, and cognitive performance in older expert ballroom dancers with several years of competitive experience. We found substantially better performance in the expert group than in the controls in terms of expertise-related domains like posture, balance, and reaction times. However, there was no generalization of positive effects to those domains that were found to be improved in amateur dancers, such as tactile and cognitive performance, suggesting that there might be an optimal range of intervention intensity to maintain health and independence throughout the human lifespan.

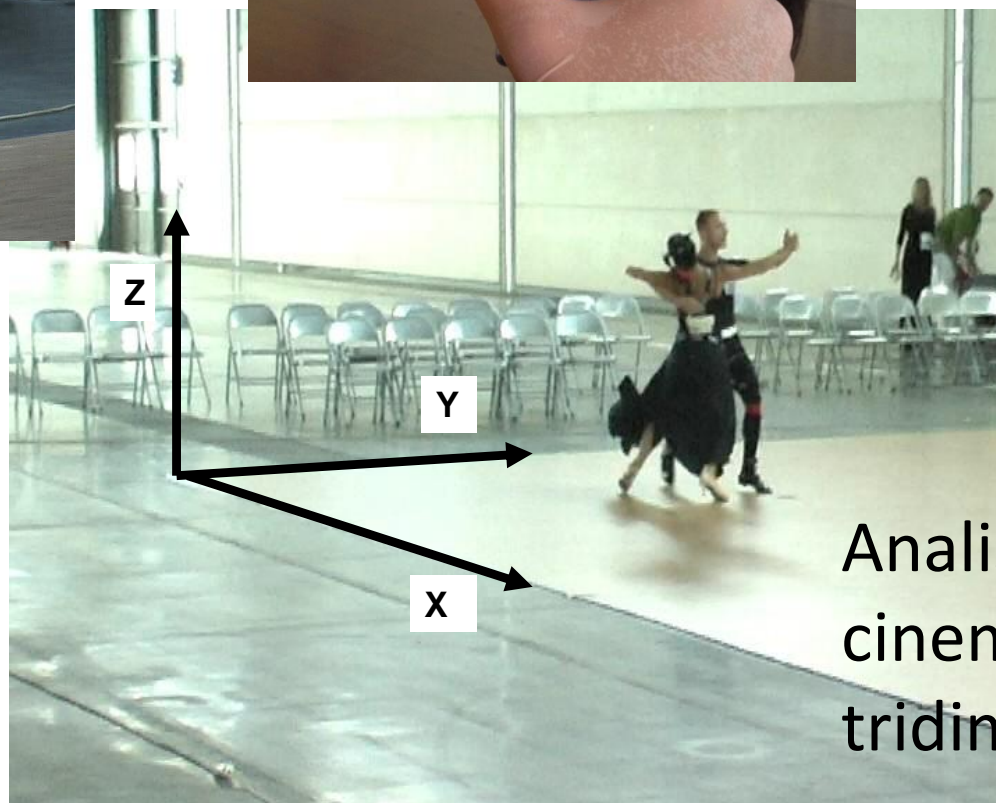




Consumo di O_2

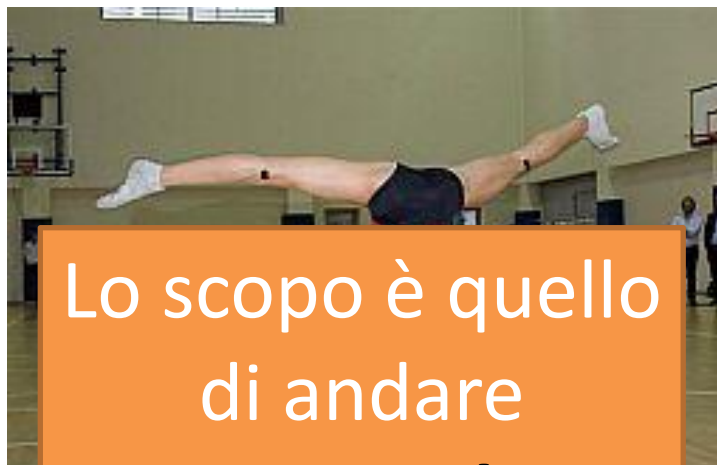


Lattato



Analisi
cinematica
tridimensionale

Accelerometria triassiale



Lo scopo è quello
di andare
sempre **più in
alto**.....in tutti i
sensi..

Potenza aerobica



Forza
esplosiva



Agilità-rapidità



Baropodometria dinamica



Definizione di Talento

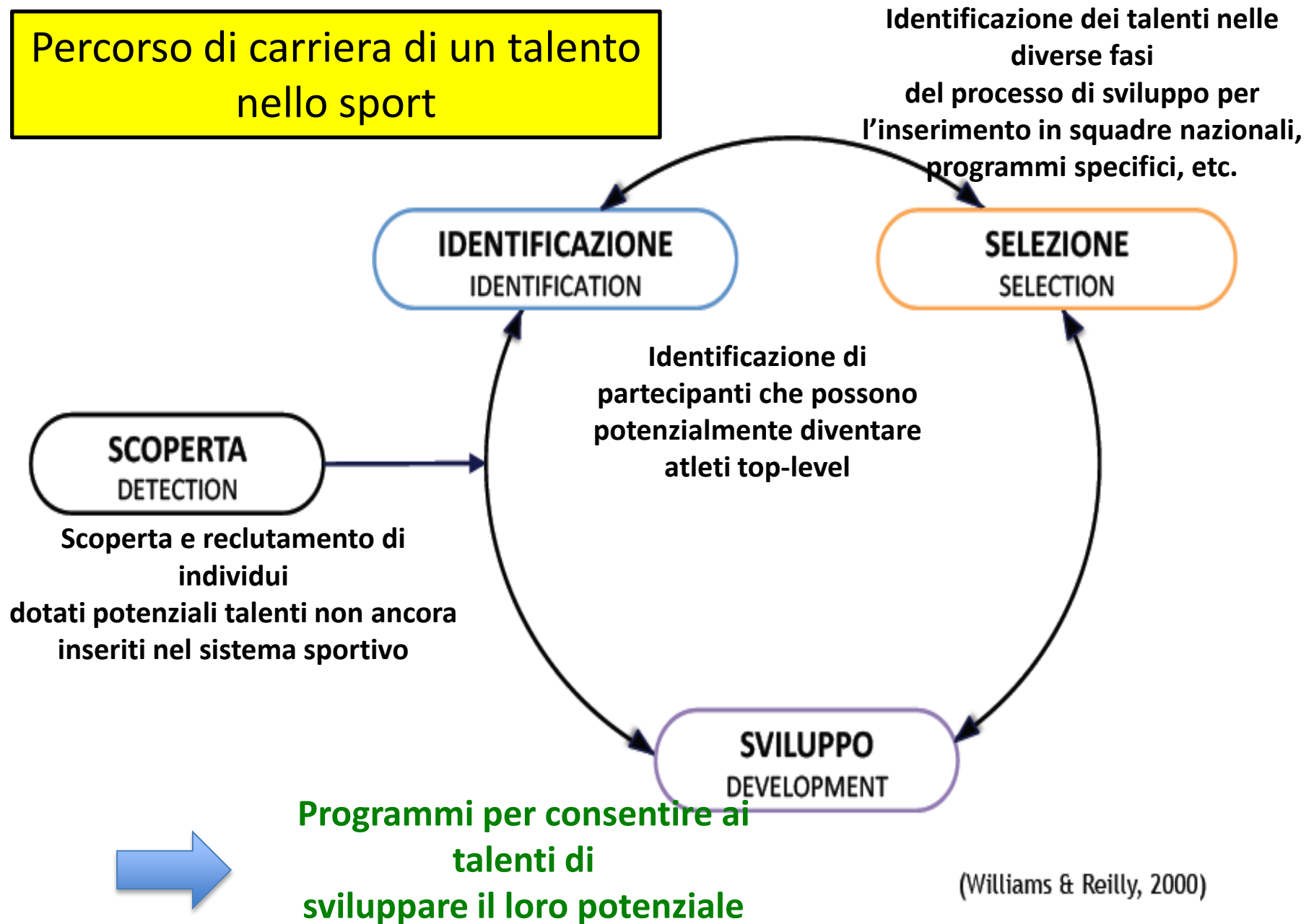


“Individuo con maggiore potenziale per eccellere in un particolare sport rispetto ad altri atleti di pari età partecipanti nella stessa nella disciplina”

(Williams & Reilly, 2000; Vaeyens et al, 2008)



Percorso di carriera di un talento nello sport





Cosa possiamo trasferire al sistema?

....fornire più occhi
all'allenatore.....

- Ne
- Ne
- Ne
- Ne
- Nelle metodologie
- Nella ricerca
- Per dare più qualità alle

abilità



.....comunicare ad atleti e tecnici.....



.....che i dettagli fanno la differenza.....