Revista de Psicología del Deporte. 2017, Vol 26, Suppl 4, pp. 115-120
Journal of Sport Psychology 2017, Vol 26, Suppl 4, pp. 115-120
ISSN: 1132-239X
ISSNe: 1988-5636

Universidad de Almería
Universitat Autònoma de Barcelona

Events of athletic career: a comparison between career paths

Javier Ramos*, Cristina López de Subijana*, Maribel Barriopedro* and Carlos Muniesa*

EVENTOS DE LA CARRERA ATLÉTICA: UNA COMPARACIÓN ENTRE LOS TIPOS DE CARRERA

KEYWORDS: Dual career, sport career development, sport stages, elite athletes, athletic career models.

ABSTRACT: The aim of this paper was to compare the sport stages of elite athletes depending on the career path they took. 476 retired elite Spanish athletes (62.5% male and 37.5% females) from 32 different sports answered a 55 items questionnaire. The starting ages of the students-athletes and the exclusively devoted to sport groups are similar. These similarities could be due to early decisions are taken by parents. Student-athletes reach also mastery stage two years earlier whereby we supposed some of the athletes do not start higher education studies as combining both activities seem to be too difficult. The best sport result was attained at different ages but it seems that the all trajectories spend seven years to achieve it. The non-student-athletes lengthened athletic career could be explained by a consequent delay in assuming new identity shifts. Finally, the student-athletes retire from four to five years before and could be explained because they usually plan more and better the retirement. In summary, the combination of a dual career with studies is the best option.

Today it is well recognised the holistic model approach in career development (Wylleman, Reints, and De Knop, 2013). This model considers the athlete as a unique entity and it takes into account different dimensions of the athlete: the sport performance, the development as person, the relationships with others, the academic/vocational and the financial dimensions. The European Union coined the term "Dual Career" (DC) as the career that an elite athlete has in terms of studying and/or working while at the same time pursuing high-performance sport (European Commission, 2012). Pallarés, Azocar, Torregrosa, Selva and Ramis (2011) propose different ways of combining these two dimensions (sport and academic/vocational). These authors classify the career paths in three different trajectories depending on the priority the athletes give. Individuals following a linear trajectories are associated with a solely devotion to sport. Those athletes that combine sports and the second activity with a priority to sports follow a convergent trajectory while subjects combining sports and studies or work with almost equal priority are the parallel trajectories. Convergent and Parallel trajectories could be considered as DC.

Facing the ancient theory posed that following a linear trajectory focused only in sport would facilitate higher sport achievements (Cecic´ Erpic˘, 2001). Researchers have found that those athletes that follow a DC perform better in both spheres of life during the career as an athlete (O'Neill, Allen, and Calder, 2013), but the student-athletes in particular, achieve higher success also during the post-sport life (Harrison and Lawrence, 2004). They also deal better with the ups and downs appeared in each one of the sport stages (Aquilina, 2013; Vallerand et al., 2006). In the last sport stage of a sport career, the retirement, there have been reported benefits associated to the DC, such as a reduction in potential psychological problems (Stambulova, 2009) or preventing from a strong and unidimensional athletic identity (Park, Lavallee and Tod, 2013).

Within the sport performance dimension, the holistic model highlights stages such as initiation, development, mastery and discontinuation. In order to define those stages, some events could be considered such as the start to practice, reaching elite level, the best result achieved and the retirement ages. Dealing with challenges the athletes have to face during athletic career,

Correspondence address: Javier Ramos Gómez, Departamento de Ciencias Sociales. Facultad de Ciencias de la Actividad Física y del Deporte. Universidad Politécnica de Madrid. C/ Martin Fierro, 7, 28040, Madrid. E-mail: seachel17@hotmail.com
* Universidad Politécnica de Madrid
** Universidad Europea de Madrid
Acknowledgements: this project was funded by the Research Advance Grant Program of the International Olympic Committee (2015-2016).
.Reception date: 20-05-2017. Acceptance date: 17-06-2017

the age plays an important role (Torregrosa, Chamorro and Ramis, 2016). As they have to develop strategies to cope with the new situations (Stambulova, 2015).

Nevertheless, the existing similarities among people carrying out the same career path, it has been also shown how cultural context determine and constrain the future of each athletic career (Battocchio, Stambulova, and Schinke, 2015). Therefore, the aim of this study was to compare the athletic career events of elite athletes depending on the career path in the specific case of Spanish elite athletes.

Method

Participants

The population targeted in this study was the retired elite athletes named in the official list of the Spanish Government. The sample consisted of 476 athletes, 298 male (62.5%) and 179 female (37.5%). The average time elapsed since the retirement was nine ± six years. Participants were from 32 olympic different sports. 297 (62.4%) of them were studying and developing the sport career at the same time, from them 168 (35.3%) followed a convergent model while 129 (27.1%) followed a parallel model. 102 (21.4%) combined sport career with work and 77 (16.2%) were involved in a linear model.

Measures

The athletes answered a 55 items ad hoc questionnaire based on previous studies (Barriopedro, Muniesa, and López de Subijana, 2016; González and Torregrosa, 2009). In this study, we analyse the ages of start practicing their sports, entering in the mastery stage, their best sport achievement and the age at the retirement of the athletes. The athletes define their mastery stage as being: a) "I was solely devoted to sport", (linear trajectory) b) "I combined studies and sport but I gave priority to sport" (convergent trajectory), c) "I combined studies and sport but I gave priority to studies or sport depending on external demands" (parallel trajectory) and d) "I combined sport and a working activity".

Procedure

The retired elite Spanish athlete population was recruited by means of different stakeholders: the Spanish Sport Council, national sport federations, and elite athlete associations. Specifically, a snowball sampling technique was utilized (Patton, 1990).

Data analysis

One-way ANOVA's were applied for analysing the degree of association. The *post hoc* analyses were done with Bonferroni adjustments. The Effect Size was measured with eta square. The risk level was fixed at .05.

Results

Table 1 shows the descriptive data of the different variables related to sport events in accordance with career path. The age of starting practicing their sport discipline was not independent of the type of career path ($\boldsymbol{F}_{3,469}$=9.2; $\boldsymbol{p}$<.001; $\boldsymbol{\eta}^2$=.056). Athletes combining sport and studies, both in parallel and convergent models started later in their sports than those combining sport and work or focused solely in sport.

An association between career path and the age in which athletes reach mastery stage, achieve the best results in their careers and retires from sport was also found. Subjects that followed convergent and parallel trajectories entered in the mastery stage ($\boldsymbol{F}_{3,471}$=30.1; $\boldsymbol{p}$<.001; η^2=.161) , achieve the best sport result ($\boldsymbol{F}_{3,468}$=28.1; $\boldsymbol{p}$<.001; $\boldsymbol{\eta}^2$=.156) and finish their sport careers ($\boldsymbol{F}_{3,472}$=32.6; $\boldsymbol{p}$<.001; $\boldsymbol{\eta}^2$=.172) at a lower age than those who chose only sport or sport and work. Finally, the period developed in elite level was longer for athletes following a linear model or a career focused in work and sport than those combining sport and studies in convergent or parallel trajectories ($\boldsymbol{F}_{3,471}$=10.6; $\boldsymbol{p}$<.001; $\boldsymbol{\eta}^2$=.059).

Discussion

This quantitative study shows the different athletic career events based on the career path chosen. Results report dependence among those athletes focused on a trajectory combining sport and studies and those who did not.

In particular, the starting ages of the students-athletes and the exclusively devoted to sport groups are similar to the data presented by Baron-Thiene and Alfermaan (2015) in their student-athletes that kept within the sport career. While those that combine a sport and work started later in their sport. Nevertheless, although it is shown that student-athletes seem to start the practice of their sports sooner, its relevance regarding career path should not be taken into account because it is not until the end of the initiation stage when the young athlete begin to take decisions about different paths and academic and socio-laboral spheres (Pallarés et al., 2011). Earlier choices are generally taken by their parents.

Regarding when athletes enter in the mastery stage, student-athletes reach this level earlier than their counterparts. Reaching the mastery stage is usually related with increase in the training load, in the commitment with sport competitions and most of the times it implies moving to a high performance center (Stambulova, 2015, Torregrosa et al., 2016). The student-athletes face this adaptation period two years earlier. In terms of studies, these high performance centers include a secondary school in the residence which facilitates following a dual career. On the other hand, the high education studies in Spain have a few flexibility advantages for maintaining a dual career (Torregrosa et al., 2016). Therefore we supposed some of the athletes quit studying as combining both activities seem to be too difficult.

Then, in relation with when the best sport result is achieved, again the student-athletes reach their peak performance from three to four years before the linear model and the athlete-worker groups. So it is not a matter of being devoted solely to sport to attain the peak performance sooner. It seems that the four different trajectories spend seven years to attain their best performance (Stambulova, 2015).

On the other hand, the length of the mastery stage was shorter among the student-athletes than on the other groups. This lengthening in sport career of the non-student-athletes could be explained by a consequent delay in assuming new identity shifts due to a lack of non-sporting life experiences (Muscat, 2010). As Stambulova (2009) suggest, athletes following linear trajectories register a high athletic identity and lower social and interpersonal sources. Similarly, athletes combining sport and studies retire earlier compare to the athletes focused on sport or those that were working.

In contrast, existing literature supports later retirements in subjects involved in linear careers or combining sport and work. The students-athletes from this sample retire from four to five years before than the other two groups analysed. Athletes combining sports and studies usually plans more and better the pass to a post-sportive life (Park et al., 2013; Tekavc, Wylleman, and Cecić Erpic, 2015) and tend towards to choose the retirement moment. By contrast, non-student athletes retire more often without planning because they have the conception that their future is already solved (Torregrosa, Ramis, Pallarés, Azócar, and Selva, 2015).

In summary, this research shows how among the different trajectories the athletes could choose; the combination of a dual career with studies is the best option. The main reason is that they prepare better for the retirement stage while the sport performance is achieved within the same amount of time.

This study presents some limitations. Firstly is the variety of the sports of the sample. The sport culture and the socioeconomic situation are different from one sport to another (Henry, 2013). Secondly, the career path was analyzed based on a question in which the athlete has to generalize from his/her mastery stage situation. As previous studies have pointed out, there are shifts and changes in the athletes' career path (Ryan, 2015). So we asked the athlete to give us the general idea, not in detail how many years was in each career path. On the other hand, the main strength of the research resides in its nature, the sample size and the quality of this sample. Future research could analyse the career paths more deeply including the shifts that occur within the athletic career.

		Career Path			
		Focused on sport (N=77)	Sport > Studies (N=168)	Sport = Studies (N=129)	Sport-Work (N=102)
Start to practice age***	Mean	10.9	9.7	10.2	12.4
	SD	3.7	3.5	3.8	5.8
Reaching elite level age***	Mean	18.2	16.9	16.9	20.4
	SD	2.9	2.7	2.7	4.4
Best sport result age***	Mean	25.6	22.9	22.4	27.3
	SD	5.0	4.3	4.9	4.8
Mastery Stage Lenght***	Mean	13.8	11.7	10.5	13.5
	SD	5.4	4.7	5.8	5.2
Retiring Age***	Mean	32.0	28.7	27.4	33.8
	SD	5.7	5.4	5.8	5.3

*Note: ***significant differences at p<0.001 level.*

Table 1. Age of the athletic career events by Career Path

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PALABRAS CLAVE: Carrera dual, desarrollo de la carrera deportiva, etapas deportivas, deportistas de élite, modelos de carrera deportiva.

RESUMEN: El objetivo de este artículo es el de comparar las diferentes etapas deportivas de deportistas de élite en función del tipo de carrera que tomaron: trayectoria lineal, convergente o paralela. 476 atletas de élite españoles retirados (62.5% hombres y 37.5% mujeres) de 32 disciplinas deportivas distintas respondieron un cuestionario de 55 ítems. Las edades de inicio en el deporte de los deportistas-estudiantes y de los que se dedicaban exclusivamente al deporte son similares. Estas semejanzas se deben a que son los padres quienes toman las decisiones en edades tempranas. Los deportistas-estudiantes alcanzan también la etapa de maestría con dos años de antelación por lo que suponemos que algunos de los atletas no empiezan los estudios superiores al parecer difícil compaginar ambas actividades. El mejor resultado deportivo fue alcanzado a diferentes edades pero parece que las cuatro trayectorias coinciden en emplear siete años en lograrlo. Aquellos no estudiantes-deportistas alargaron la carrera deportiva posiblemente debido al consecuente retraso en asumir nuevos cambios de identidad. Finalmente, los estudiantes-deportistas se retiraron entre cuatro y cinco años antes y podría explicarse por que planifican más y mejor la retirada. En resumen, la combinación de una carrera dual con los estudios es la mejor opción.

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