# SPORT TRAJECTORY OVER A LIFESPAN PERSPECTIVE. A COMPARATIVE STUDY BETWEEN MANAGERS AND GENERAL POPULATION IN BARCELONA

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## Abstract

During the last decade, a new stream of thought has emerged focusing leader development across the lifespan of an individual. As it is suggested in some studies, participation in childhood organized sport may influent the development of the leader, that is why arises the necessity to study the sport trajectory in a sample of managers compared with the general population in Barcelona (Spain), trying to identify if sport and physical activity could be an impact factor in leadership development. A quantitative retrospective cross-sectional design was carried out recruiting a total of 360 participants (150 women and 210 men) aged 18 to 65 years old from Barcelona. Data were gathered using the validated questionnaire named Sports Trajectory Questionnaire (STQ). The results showed significant differences between both samples regarding regularity of practice, kind of sport and competitiveness showing than managers present a more constant, competitive and combined practice of individual and collective sports across lifespan than general population. The approach of this research is focused on the contribution of Physical Activity (PA) and sport practice (SP) to leadership development across the lifespan from the point of view of the Lifespan developmental psychology perspective. Consequently, the aim of this research is (1) to describe the SP & PA practiced beyond a lifetime of a sample of managers and (2) to analyse the findings between this sample and the general population to investigate if sport practice could be an effective element in leader development.

Keywords: Sports trajectories. Lifespan. Physical activity questionnaire. Leadership manager

#### Introduction

The new social paradigm that has emerged during the last decade encompassed by a context of pandemic during the last two years, arises the need to find referents who can make the right decisions. Organizations are working hard to find leaders who can adapt to these changes and provide the necessary answer by implementing all kind of leadership development programs trying to influence it with effectiveness. (Avolio *et al.*, 2009 & Lacerenza *et al.*, 2017)

Most of the research around leadership has focused on developmental experiences that occur during adulthood, analyzing adult leaders and managers. Although research suggest that there are some human capital factors like expertise, identity or adult experiences that impact on leadership development during adulthood (Day et al., 2009), there is a growing literature that focus on social capital implying that building relationships and network connections are effective in improving executive performance (McCallum & O'Conell, 2009; Meirovich & Goswami, 2021 & Van de Valk & Constas, 2011)

However, during the last decade, another stream of thought has emerged focusing leader development across

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the life span of an individual. Lifespan developmental psychology (LP) is an orientation that concerns with the description, explanation, and modification of developmental processes in the human life from conception to death (Baltes *et al.*, 1980). This perspective is based in the assumption that each period of life has its own challenges and developmental successes. It is about comparing the development of an individual with that of others and with the person's own state at different times (Baltes *et al.*, 1999)

The research around developmental psychology has demonstrated that childhood and adolescence are the stages of development which significant changes taking place both at the motor, cognitive and emotional levels (Fischer,1980 & Gardner, 2011). It is a sensitive period were all the lived experiences can influent more significantly the identity construction of an individual (McAdams & Zapata-Gietl, 2015) and, therefore, these early experiences create the foundation for future leadership development to build on (Murphy & Johnson, 2011).

As it is suggested in some studies, participation in some organized activities, like sports during childhood and adolescence (Murphy & Johnson, 2011 & Liu *et al.*, 2020) may influent the development of the leader and predict behaviours in adulthood (Howie, 2016).

Regularity of practice on a lifespan perspective has been extensively studied over the years by numerous scientists, mostly focused on the study of the healthy lifestyle or wellbeing of the population (Hyde *et al.*, 2013). However, there is an increasing interest among identifying sport trajectories (Howie *et al.*, 2016) and long-term patterns of physical activity that could be used as a behavior predictor, to work on different collectives. (Barnett *et al.*, 2008 & Palomäki *et al.*, 2018).

Following this line of investigation, Mäkelä *et al.* (2017) examined whether a greater diversity of sport activities during adolescence predicts higher levels of LTPA in adulthood and concluded that a greater diversity of leisure-time sport activities in adolescence predicts higher levels of LTPA in adulthood in females but not in males.

In this sense, the investigation carried out by Riera & Moragas (2021) showed that the variables of regularity of practice, kind of sports and competitiveness are key elements to analyze the sport trajectory of an individual. Also, it was

showed how the combination of them could be used to build sport profiles to analyze the variable sport practice and physical activity with any other variable as leadership.

During the last decades, the controversy around the benefits of practicing collective sports versus individual sports has entailed some studies analysing how the variable kind of sport could impact in the development of certain personality traits showing significant differences between individual and collective sports. (Weinber & Gould, 2014).

Related to this matter, Madic *et al.* (2015) found that practitioners engaged in individual sports showed more tendencies to observe the rules, disciplined behavior, greater accountability to the commitments and greater emotional stability. They are self-motivated (Gené & Latinjak, 2014) and they have a higher ability to control themselves, probably because they found themselves in situations of making independent decision, they bear the responsibility for success of the achievement of the results (Frank, 2009). Furthermore, athletes playing individual sports had higher scores on "planning" and "effort" than team sport athletes (Jonker *et al.*, 2010).

On the other hand, athletes who are engaged in team sports show higher levels of extraversion (Allen *et al.*, 2011) and social acceptance, they feel better among peers and they have more pronounced ability to form friendships (Korovijev *et al.*, 2016). They also show higher levels on agreeableness and sociotropy than individual sport athletes, this could be explained because team sports provide a suitable ground for achieving trust, an interpersonal factor that give the individual the possibility to rely on others more easily and develop the group activities and relationships and also, altruism and compliance combined with intensity and arrangement. (Nia & Besharat, 2010). Team sports usually request higher levels of interdependence and social interaction (Van Vianen & De Dreu, 2001). The team sport athletes scored significantly higher on agreeableness and sociotropy than did the individual sport athletes.

Competitive sport understood as any organized sport activity in which training and participation are time-consuming and in which the level of performance meets relatively high standards of expectation (Coakley,1983), provides unique benefits to participants above and beyond those gained from general physical activity (Dionigi *et al.*, 2011). Some authors (Allen & Laborde, 2014) found that organized sport represents a competitive context in which some personality

traits have been found to coincide with greater levels of success. Competition, provide with an opportunity to develop leadership skills through playing with older peers (Wright, & Côté, 2003) and higher levels of extraversion (Madic *et al.*, 2015).

These investigations show how physical activity and sport practice could be an impact factor in the development of the leader that is why arises the necessity to study the sport trajectory in a sample of managers compared with the general population in Barcelona (Spain). The approach of this research is going to focus on the contribution of Physical Activity (PA) and sport practice (SP) to leadership development across the lifespan from the point of view of the Lifespan developmental psychology perspective. Consequently, the aim of this research is (1) to describe the SP & PA practiced beyond a lifetime of a sample of managers and (2) to analyse the findings between this sample and the general population to investigate if sport practice could be an effective element in leader development.

### Design

#### Methods

A quantitative retrospective cross-sectional design was carried out with the purpose of examining if sport practice could be an effective element in leader development. Data were gathered using the validated questionnaire named Sports Trajectory Questionnaire (STQ). It is an online self-administrated questionnaire that collects all the information regarding the sport trajectory of an individual during his lifespan (Riera & Moragas, 2021). The first group of participants were recruited through a post on Linkedln and Twitter that had a direct link to the questionnaire. The questionnaire included a previous section where all the participants are informed about the research and by clicking to the bottom agreed they consented to the participation in the research and could continue filling in the questionnaire. The second group of participants were contacted one by one by e-mail or telephone. All of them were provided with all the documents informing about the research. Once the informed consent was signed, they filled in the questionnaire.

## **Participants**

A total of 360 participants (150 women and 210 men) aged 18 to 65 years old (Me 37,68 & s 8,98) from Barcelona were recruited for this study in two different stages. The first sample correspond to a o non-probabilistic voluntary response sampling composed by 274 participants (127 women and 147 men) labelled as general population, who were recruited through and add in social media (Linkedin and Twitter). The second group correspond to a non-probabilistic snowball sampling composed by 86 managers (23 women and 63 men) aged 18 to 65 (Me 43,79 & s 9,14) from private companies in Barcelona. The inclusion criteria in this case were: a) to be manager of a private company and b) to have five or more employees. All participants were informed about the research and provided with the informed consent about their participation in this study, which was carried out following the principles of the Declaration of Helsinki.

## **Data Analysis**

Following a previous study (Riera & Moragas, 2021), three variables were selected and coded based on the influence to the development of an individual during the lifetime. The first variable refers to the regularity of practice in sport and PA in each stage (1, Yes, if they have practiced during all stage; 2, No, if they didn't practice sports or PA during all stage). The second variable analyzed relates to the kind of sport or PA was practiced (1, Individual, if they have practiced individual sports during the stage; 2, Collective, when it was practiced collective sports during all stage; 3, Mixt, when it was practiced both individual and collective sports). Finally, the third variable measure the present

or absence of the component competition in the sport practice (1, Competition, when the sport practiced was competitive during all stage; 2, No competition, if the sport of PA wasn't competitive during all stage; 3, Combined, when it was practiced both of them). Each variable was coded taking into account all the development stages of the STQ to finally create final profiles of each variable based on the mode and the relevance of the first and second stage (Childhood and adolescence) of the development. Once the data was coded, each variable was analyzed separately to study different outcomes between the two samples.

The statistical measure used to analyze the data was Chi Quadrat, which provided us with the two-tailed p-value.

### Results

The variable measuring regularity of practice offers two different profiles: constant, when sport was practiced across all lifespan and non-constant, when it wasn't practiced during all life. The results of analyzing this variable show that, in general terms, managers are more constant in the practice of sport and PA than the general population. After breaking down data by decade of birth it is seen that constant regularity of practice is a common denominator for managers born from 60's to 90's whereas constant practice in general population has been increasing over the decades but it is found a decrease in people born in 90's due to a lot of abandon cases found in the sample. The results of Chi Square test for assessing the independence of the variables year of birth and regularity of practice show a strong dependency between these variables in the general population sample (p = 0,0016). As explained before, people born in the 80's have a regular practice profile whereas in people born in 90's it is found a great level of abandon. Contrary to the general population, there is no dependency between the decade of birth and regularity of practice in managers (p = 0,71) because all the managers have a constant profile regardless of their year of birth. The general population has been modifying the regularity of practice over time, while the average manager has been a sporty person during their entire lives who at some point in their trajectory become a manager.

As shown in table 1, there are some differences between managers and the general population

with respect to gender and regularity of practice. It has been found that managers have a constant profile. Most of female managers have a constant profile (69.6%) and it is even more predominant in male managers (90.5%). However, in the non-manager sample it has been found a great equality between constant (52.4%) and non-constant profiles (47.6%). If we disaggregate this by gender, we observe that men have a slightly more constant profile (56.8%) than women (43.1%). The results of Chi Square test for assessing the independence of gender and regularity of practice in both samples, show a significant dependency in the manager sample (p = 0.01) while there is not such dependency in the general population (p = 0.11). Finally, the correlation between regularity of practice variable and the manager-non-manager variable shows a strong dependency. This result confirms what it has been seen at first glance examining the most frequent profiles of each sample. It is important to mention that people born during 2000 was excluded from the analysis of the variable decade of birth in all cases because they didn't have enough time to become managers in most of the cases, but it was included in the analysis of the variable gender because it give us more information in both samples.

One of the analyzed variables in the study is the kind of sport practiced by each individual regarding collectiveness (individual, collective or mixt). This variable reveals three profiles: an individual profile, when the person has a majority practice of individual sports over life; a collective profile, when the sports practice has been mostly collective sports; and a mixt profile, if a person

			ı	Non-Manager	s		Managers					
		Cons	Non-Cons	Total	Cons	Non-Cons	Cons	Non-Cons	Total	Cons	Non-Cons	
Decade of birth	60	28	25	53	53%	47%	17	3	20	85%	15%	
	70	30	16	46	65%	35%	24	4	28	86%	14%	
	80	42	13	55	76%	24%	27	4	31	87%	13%	
	90	34	41	75	45%	55%	4	1	5	80%	20%	
Total		134	95	229**	58,52%	41,48%	72	12	84**	85,71%	14,28%	
									,			
Gender	М	83	63	146	56,8%	43,15%	57	6	63	90,48%	9,5%	
	W	58	65	123	47,15%	52,84%	16	7	23	69,56%	30,44%	
Total		141	128	269**	52,41%	47,58%	73	13	86**	84,88%	15,11%	

 $\textbf{Table 1:} \ \ \textbf{Regularity of practice from managers and non-managers.}$ 

<sup>\*</sup> Cons: Constant; Non-Cons: Non-Constant

<sup>\*\*</sup> Gender includes people born during 2000 while decade of birth doesn't include them.

presents a combined practice of individual and collective sports across lifespan. The analysis of this variable has found remarkable differences between both samples with a significant dependency (p=0.049). The mixt profile is prevalent in the managers sample (47.61%) while the individual profile is prevalent in general population (41.48%). It has also been analyzed the relationship between the kind of sport and the decade of birth in order to assess how it has evolved over time. The Chi Square Test has not shown any significant dependency between both variables. Individual sports have been the most usual option for non-managers born from 60s to 90s, with a little exception in people born in the 80s where the mixt profile is slightly higher than the individual. It has not been appreciated any remarkable trend from one decade to another. With regard to manager population, mixt profile is the leading one all over time. However, it has been a change in the least present profile, which was collective in 60s and 70s and individual in 80s and 90s.

After examining the result from the gender perspective, it has been found a notable dependency in the non-manager sample between gender and kind of sport (p=0.006). Women present more often an individual profile, while men present a very similar trend in the three profiles. This dependency is not relevant in the manager's sample. Collective profiles get a very similar result in both samples for men and women. The main difference remains in individual and mixt profiles. Both men and women managers have got a mixt profile instead of individual but this difference is very noticeable in women (Table 2).

Finally, it has been studied the competitiveness profile of each individual regarding the sports that has been practiced across the lifespan. There are three possible outcomes for this categorical variable: A competitive profile, when the individual has a majority practice of competitive sports; a noncompetitive profile, if the person has practiced sports but recreationally or by medical prescription; and a combined profile when people present both competitive and non-competitive sports practice. The results show that general population have a less competitive profile than managers (41.48%). As shown in table 3, managers present profiles where the combination of both competitive and non-competitive (47.61% for managers and 34.50% for nonmanagers) are more present than in general population. This is demonstrated with a strong dependency between the manager/non-manager binary variable and the kind of sport variable (p=0.00085). After exploring the variable decade of birth, it is shown that managers who were born in 60's and 70's have a profile where it prevails the combined option (competitive and noncompetitive) while in the managers who were born from 1980 (80's) to 1999 (90's) prevails the competitive profile. On the contrary, the non-competitive profile is predominant in the general population. The participants who were born from 1960 to 1989 have a non-competitive profile while the ones who were born during the 90' showed a combined profile.

It has been studied if there are remarkable differences in terms of gender. Combined profile is the most frequent in men, being even more frequent in the manager sample. In the other hand, non-competitive profile is the predominant one in the general population women, whereas in women manager the three profiles are equaled. Men managers have got a similar competitive profile result in both samples (31.50% & 33.34%). The difference in men results has been found in the fact that that half of non-competitive non-managers are translated into combined profile when looking at the manager sample. However, proportion of women of non-competitive profile, which is predominant in non-manager sample, is translated both in more competitive and combined profiles in the manager sample (NC:53.65% to 30.43%; C: 21.95% to 34.78%; 24.39% to 34.78%).

Also, it has been analyzed the relationship between regularity of practice and competitiveness variables and it has been found a very significant dependency. The part of the general population with a constant profile has a combined profile regarding competitiveness, while as it has been shown previously general population has a non-competitive profile (Chi-square test p-value of 6.75E-7). In a similar way, in the manager sample, the probability of having a non-competitive profile is very low, but is much higher for non-constant profile manager. (Chi-Square test p-value of 0.001)

In table 4 it is shown a summary of the Pearson correlation coefficients between all the variables in the study. The ones below 0.05 indicate a dependency between variables. It is rapidly seen that manager and non-manager samples behave quite differently regarding gender. Kind of sport and competitiveness in non-manager sample are related to gender whereas it is only related to regularity of practice in manager population. Another difference is found in the correlation between regularity of practice and decade of birth. It has been found a dependency only in non-manager sample because regularity in manager has remained quite constant in managers born during the last decades while it has been evolving to a more constant profile in the non-manager sample. Table 5 show the Pearson correlation coefficient between managers and general population (non-managers) regarding the three variables studied as it was commented above. Finally, it was analyzed the Pearson correlation coefficient between the managers from the sport sector and the managers from other fields. As it is shown in table 5, there is dependency between both sectors in the variables kind of sport and competitiveness while it hasn't been found any significant correlation between sport sector and non-sport sector in the regularity of practice. Managers from the sport sector are more competitive than the rest of the sectors that are equality in all options (competitive, non-

Non-Managers Managers Col Ind Mixt Col Ind Mixt Col Ind Mixt Col Ind Mixt Decade of 60 10 24 19 53 18,87% 45,28% 35,85% 20 30,00% 35,00% 35,00% birth 70 15 18 13 46 32,61% 39,13% 28,26% 6 9 13 28 21,43% 32,14% 46,43% 80 15 19 21 55 27.27% 34.55% 38,18% 10 6 15 31 32.26% 19.35% 48.39% 90 19 32 24 75 25.33% 42.67% 32.00% 2 2 5 40.00% 20.00% 40.00% 84\* 59 77 37 Total 93 229\* 24% 41.48% 34,5% 24 23 34,5% 17,85% 47,61% 47 49 146 31,75% Gender М 50 32.19% 33.56% 34.25% 20 16 27 63 25.40% 42.86% hirt W 24 64 19.51% 52.03% 28.46% 5 8 10 23 21.74% 34.78% 43.48% 35 123 71 113 85 269\* 26,39% 42% 31,6% 25 24 37 86\* 29% 27,90% 43,02% Total

 Table 2: Kind of sport from managers and non-managers.

 Table 3: Variables competition from managers and non-managers.

			Non-Managers					Managers								
			С	NC	СВ	Т	С	NC	СВ	С	NC	СВ	Т	С	NC	СВ
Decade of birth	of 6	0	13	28	12	53	24,53%	52,83%	22,64%	6	2	12	20	30,00%	10,00%	60,00%
	7	'0	10	19	17	46	21,74%	41,30%	36,96%	6	8	14	28	21,43%	28,57%	50,00%
	8	30	10	25	20	55	18,18%	45,45%	36,36%	14	4	13	31	45,16%	12,90%	41,94%
	9	0	22	23	30	75	29,33%	30,67%	40,00%	3	1	1	5	60,00%	20,00%	20,00%
Total			55	95	79	229	24%	41,48%	34,5%	29	15	40	84	34,5%	17,85%	47,61%
Gender	М		46	43	57	146	31,50%	29,45%	39,04%	21	9	33	63	33,34%	14,29%	52,38%
	W		27	66	30	123	21,95%	53,65%	24,39%	8	7	8	23	34,78%	30,43%	34,78%
Total			73	109	87	269	27,13%	40,52%	32,34%	29	15	41	86	33,72%	17,44%	47,67%

<sup>\*</sup> C: Competitive NC: Non-competitive CB: Combined T: Total

<sup>\*</sup> C: Collective I: Individual Mixt: Mixt T: Total

<sup>\*\*</sup> Gender includes people born during 2000 while decade of birth doesn't include them.

<sup>\*\*</sup> Gender includes people born during 2000 while decade of birth doesn't include them.

Table 4: Pearson correlation coefficient for of practice, kind of sport and competitiveness, decade of birth and gender variables.

	Decade of Birth	Gender	1	2	
Non-managers					
1.Regularity of practice	6.12 E-8	0.11	-	-	
2. Kind of sport	0.64	0.0061	0.0016	-	
3. Competitiveness	0.068	0.00028	6.74 E-7	4.74 E-12	
Managers					
1.Regularity of practice	0.071	0.016	-	-	
2. Kind of sport	0.81	0.57	0.013	-	
3. Competitiveness	0.27	0.17	0.0017	2.76 E-8	

Notes: \*p<0.05

**Table 5:** Pearson correlations coefficient for general population and managers samples.

	Regularity of practice	Kind of sport	Competitiveness
General/Manager**	8.49 E-5	0.049	0.00085
Sport/Non-sport**	0.11	0.0071	0.0026

<sup>\*</sup>General population sample (non-managers) vs manager sample

competitive or combined). Although, managers from the sport sector present a profile less individual than the rest of the managers who present a profile less collective, both of them show high prevalence in mixt profile.

#### Discussion

The current research analysed the sport trajectories of a managers' sample trying to move forward to explore the process of leader development. In accordance to Liu et al. (2020), the present article predicted a significant relationship between sport trajectory and leadership development. In general terms, findings of this research support the initial hypothesis that managers and non-managers have a different sport trajectory but it is important to analyse it more closely.

## **Regularity of practice**

The results of analyzing this variable, identify two trajectories in both managers and non-managers: constant and non-constant profiles. Is understood as a constant profile, people who has practiced sports or physical activities across their lifespan, while a non-constant profile refers to a sum of different behaviors as abandonment, late joiners or people who come and go from sport practice. In this regard, Barnett *et al.* (2008) identified four trajectories: inactive, increasers, active and decreasers, depending on socioeconomic and demographic factors. More specific, Howie *et al.* (2018) identified different sport trajectories depending on the gender: consistent sport participation, that was common in both genders and non-consistent sport practitioners that varied based on gender to sport dropouts, sport joiners and non-participators.

In this research, even both genders present both profiles in both samples, managers present a predominant sport constant profile in both male (90.5%) and female (69.6%) while the non-managers' sample, show equality between the two profiles with a slightly difference in the constant profile between men (56.8%) and women (43.1%). This difference between the prevalence of the constant profile between male and female support the findings obtained by Mäkelä et al. (2017) suggesting that males tend to maintain their level of PA better than females. This difference is even more pronounced when a leading position is added and the person has to reconcile it with sport, family and personal life as it happens with women managers. In this case, it's difficult to find time for everything so they tend to choose work and family while men that can reconcile all factors is due to a third party (Moragas, 2014).

In the same direction, after exploring the results by decade of birth it is showed that managers present a constant profile over time while general population have an increasing constant profile during 60's, 70's and 80's and a non-constant profile in people born in the 90's. These results are in accordance to Breuer & Wicker (2009) who performed a longitudinal study demonstrating that sports activity increases with increasing age in general population. The difference found in people born in the 90's are in accordance to Keating *et al.* (2005) who carried out a meta-analysis in which they found that, nowadays, about 50% of college students don't participate in adequate amounts of PA. Guided by the social cognitive theory, researchers identified 4 different determinants of college students' PA: personal, social, cognitive, and environmental factors that can explain this results and suggest that current colleges don't encourage students to be an active adult. Although every year there is more engagement to sport practice among the Catalan population (Observatori Català de l'Esport, 2016) this practice is not constant due to the abandonment of adolescents

and young people (García & Llopis, 2017). In relation to the constant practice of sport among managers, there is not enough literature that could explain these finding beyond thinking that average manager has been a sporty person during their entire life who at some point in their trajectory become a manager.

## Kind of sport

Three trajectories were identified, in both samples, derived from exploring the participation in individual and collective sports or physical activities: individual, collective and mixt (both individual and collective). In accordance to AFEC, 2019, the results of this study, found that individual profile is prevalent in general population. In the other hand, managers show a mixt trajectory. It was not found literature that can support or contradict the results found around the managers sample, but, these results, can be the effect of a positive youth development as it is suggested in the study carried out by Agans & Geldhof (2012) who investigate the developmental effects associated with participation in individual sports, team sports, and dance-type sports across a stage of life of 3 years. The results indicated that youth who participated simultaneously in both individual and team sports, showed the most favorable outcomes in Positive Youth Development.

The differences found between the two samples regarding the variable kind of sports, are important with regard to the psychological characteristics according to the type of sport as suggested by Weinberg & Gould (2014) who demonstrates that athletes who belong to individual sports and those who belong to the collective sports, have different personality traits. Knowing the psychological characteristics in relation to the type of sport, it is interesting to continue investigating more comprehensively the outcomes of the mixt profile that all managers present, both male and female.

# Competitiveness

The results of analyzing the variable competitiveness show that general population have a less competitive profile than managers who present profiles where competition and the combination of both competitive and non-competitive are more present than in general population. These findings are in accordance with Allen & Laborde (2014) who postulate that athletes competing in national or international competitions report higher levels of conscientiousness and lower levels of neuroticism. These personality traits are related with athletic success but also are observed in other performance context as occupational success. Also, it is seen that the competitive profile is transformed into a combined profile progressively. It is an expected result because competition is mostly linked to younger stages of life. Participants may abandon competition but continue practicing sport.

The combined profile is the most frequent in men, being even more frequent in the manager sample. In the other hand, non-competitive profile is the predominant one in the general population women, whereas in women manager the three profiles are equaled. These results are in accordance to Warner & Dixon (2015), who revealed that women and men tend to view and interpret competition differently. They also have different physiological, psychological and social reactions to it, which strongly impact their sport experiences. During the last decades, boys and girls were socialized differently into sport, this impacts how they view competition, and the centrality of competition to their sport experience (Dixon, 2008) These facts lead to find more competitive sport practice in men than in women.

<sup>\*\*</sup>Managers from the sport sector versus managers from the sport sector

#### Limitations

This study presents several limitations that need to be taken into consideration. The results presented above may be different in future analysis generations as the current participants were people from all ages. Consequently, the sport trajectory of a 70 years old person is probably more consolidated than the one from a 25 years old person, that it will evolve during the following years. This offers an interesting opportunity to repeat the study every 5-10 years to study the evolution of the sports trajectories. In addition, the small manager sample provides limitations in comparison with the other samples and difficult the generalization of the findings. Finally, demographic factors such as level of studies or socio-economic status were not taken into account and could help to understand some results.

# **Conclusions/Concluding comments**

As is known, this is the first study to identify sport trajectories in a sample of adults comparing managers with general population across lifespan. Staring from the evidence that physical activity contributes to personality change (Allen, & Laborde, 2014), this study answers the call of the authors Murphy & Johnson (2011) to explore the lifespan approach in leadership development in a variety of ways conceptualizing physical activity and sports involvement as a dynamic behavioral process.

Despite the positive findings around the different trajectories in managers and general population it is not possible to confirm if sport practice and physical activity can impact on leader development as it is suggested, so it will require more research to explore this approach. Also, studies incorporating qualitative analyses and mixed methodologies will gain a clearer understanding of this topic of interest.

In sum, the present study represents an important first step toward a new perspective of leadership development, in which the sport trajectory of a person and the sport experience and context lived around the sport can impact on the development of certain skills that could have a direct or indirect effect towards leadership development. More research around this line of investigation could be useful in human resources recruitment.

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