

# The International Journal of Human Resource Management

ISSN: (Print) (Online) Journal homepage: [www.tandfonline.com/journals/rijh20](http://www.tandfonline.com/journals/rijh20)

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**To cite this article:** Jeremy Celse & Kirk Chang (2024) Athletic participation brings more job opportunities, true or false?, *The International Journal of Human Resource Management*, 35:7, 1225-1249, DOI: [10.1080/09585192.2023.2267426](https://doi.org/10.1080/09585192.2023.2267426)

**To link to this article:** <https://doi.org/10.1080/09585192.2023.2267426>



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Published online: 16 Oct 2023.



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## Athletic participation brings more job opportunities, true or false?

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### ABSTRACT

Fair recruitment matters, as it affects employees, managers and the organization. The phenomenon of athletic-participation-preference (APP) concerns both scholars and managers, affecting the policy and implementation of fair recruitment. Drawing on the stereotype theories, the current research clarifies the formation and implications of APP in recruitment, along with three unique findings. Firstly, the influence of athletic participation in recruitment is not universal, as recruiters may possess different views. Secondly, the influence of athletic participation in recruitment is not consistent. APP does not boost wage, and the APP is perceived differently between age groups. Finally, team-spirit and goal-orientation are not relevant to APP, as both values exist in both sport and non-sport fields. Research findings have implied that recruiting education and trainings, ethics workshops, and recruiting experiences are crucial to the fair recruitment, alleviating the impact of athletic-participation-preference in recruitment. Suggestions for future studies and fair recruiting practices are also discussed.

### KEYWORDS

Athletic participation; athletic-participation-preference (APP); athletes' premium; discrimination; fair recruitment

## Introduction

Fairness matters, because people like to be treated fairly. Fairness means impartial treatment without favoritism and discrimination. Take the workplace for instance, if managers expect their employees to perform well and remain efficient at the optimum level, managers must treat their workforce fairly, equally and with respect (Greenberg, 2011; Mulgund, 2022). In the lens of employee recruitment, more specifically, fairness is

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extremely important, as fair recruitment eradicates the bias from the first impression of job applicants, such as the bias against Black women with curly hairstyles (Koval & Rosette, 2021), female immigrants from minority ethnic groups (Hangartner et al., 2021), and senior job applicants (Turek & Henkens, 2020). When fair recruitment is practiced through impartial evaluation and selection criteria, managers can further prevent misjudgment in shortlisting job applicants (ILO, 2015; Lavanchy et al., 2023). A fair and well-designed recruitment system also helps the organization build a pool of talented employees, stabilizing the staff turnover rate (Abbasi et al., 2022; Challinor & Whyler, 2022).

Despite the importance of fair recruitment, a preference of athletic participation has emerged in the labor market, bringing concerns to the managers, organizations and job applicants (Dwyer & Gellock, 2018; Paul et al., 2023). That is, athletic participation is a preferable character during the recruitment. For example, applicants with athletic participation (either amateur or professional) are more likely to be appointed than those without such participation (Bowker, 2006). By analyzing the phenomenon of 'Athletes' Premium', Henderson et al. (2006) discover that on average former college athletes earn more salaries (*hence called athletes' premium*), although the rate of premium is not consistent across sectors. Applicants who signal athletic participation receive higher call-back rates, yielding more job opportunities (Dwyer & Gellock, 2018; Rooth, 2011). Student-athletes develop greater mentoring skills and emotional intelligence, leading to higher starting salaries when they enter the professional workforce, and faster rates of salary growth as their careers progress (Sauer et al., 2013). From a different but relevant perspective, employees who exercise sport-activities tend to earn higher salary than those who do not exercise (Barron et al., 2000; Lechner & Sari, 2015). Although different in nature, prior studies have shown preliminary credence to the discrimination phenomenon in employee recruitment, in which the appointment is based on one's athletic participation (e.g. background & relevant experiences), rather than job-required qualifications and skills.

In the current research, we frame the aforementioned phenomenon as *athletic-participation-preference* (APP), and we propose the main research question as: "*Does profession restrain APP?*", along with the rationale below. Firstly, although scholars have found the impact of APP in recruitment, how APP occurs is not always clear (Lechner & Sari, 2015; Rooth, 2011). A new research is therefore necessary, as it helps clarify the reasons underlying the APP, including its developmental mechanism. Secondly, prior studies propose the importance of athletic values (Ewing et al., 2002; Wininger & White, 2015), but how these values are linked to the recruitment is largely unknown. A new research is thus imperative and helps explain how the values are related to APP; and, finally, a new

research helps clarify the function of anti-APP strategies, which is meaningful to the HR managers and recruitment policy makers. Overall, it is our belief that research outcome will clarify the construct and formation of APP, explaining how APP affects fair recruitment. Research findings will also offer new insights to the design of a fairer recruitment system, helping HR managers eradicate APP in the recruiting practices.

This article now turns to introduce the research rationale through literature review. Following the literature, we formulate research hypotheses and elaborate research method. The research-data are statistically-analyzed and, subsequently, discussed. Finally, the contribution and value of the current research findings for theory and practice are provided, as well as an overview of the research's limitations and suggestions for future studies.

### Literature review

Employee recruitment describes a process where the organization seeks, selects and appoints employees. Recruitment is fundamental to the organizational lifespan; to be exact, fair recruiting procedure is crucial to the personnel management and employee development (ILO, 2015). Fair recruitment helps managers avoid discrimination in recruiting procedure (Lavanchy et al., 2023) and stabilize the staff turnover rate (Abbasi et al., 2022; Chang, 2011). More recently, scholars have affirmed the significance of 'fair recruitment' by analyzing various cases, such as age discrimination (Turek & Henkens, 2020), minority ethnic groups in recruitment (Hangartner et al., 2021), and gender discrimination (Koval & Rosette, 2021). Simply put, fair recruitment is not only important to the job applicants, but also beneficial to the employees, managers and organizations.

Following this line of research, a new form of discrimination has drawn our attention (i.e. athletic participation), because it is against employee rights and affects everyone at work. In the current research, we adopt the stereotype theory (Allport, 1954; LaVioletter & Silvert, 1951) to discuss "athletic participation", along with three reasons: i). stereotype refers to the attributes that people think characterize a subject (Operario & Fiske, 2003); ii). scholars describe stereotypes as generalizations about the personal attributes or characteristics of a group of people (Oakes et al., 1994); and, iii). there are stereotypes of athletes, for example, athletes are perfect team-workers, assuming that team-based athletes (e.g. football, cricket, baseball) value mutual-support, coordination and learning (Ewing et al., 2002; Wininger & White, 2015). Through the lens of the stereotype theory, we are keen to interpret the phenomenon of athletic-participation-preference (APP), clarifying the rationale behind APP as well.

### ***Athletic-participation-preference (APP) and its role in recruitment***

As explained by the stereotype theory, stereotype effect occurs at *explicit*- or *implicit*-levels. An explicit stereotype refers to stereotypes that one is aware that one holds, and is aware that one is using to judge people; simply put, the stereotype describes a fixed idea about a particular subject (LaVioletter & Silvert, 1951). For instance, when Person A sees Person B shows a particular behavior, A may attribute such behavior to B's characters, rather than the reasons and mechanisms involved in such behavior. Alternatively, when Person C meets Person D the first time, C may assign D to a particular group of characteristics without further interaction, in which the assignment is primarily subconscious and may not accurately reflect the reality (implicit stereotype; Allport, 1954).

Due to the stereotype effect, general public often assign a variety of values (*aka.* athletic values) to the athletes, such as competitive (Wininger & White, 2015), team-workers (Ewing et al., 2002), good interpersonal skills, leadership abilities (Ryan, 1989), team loyalty, and team spirit (Alchian & Demsetz, 1972). From a recruiting prospective (the main theme in the current research), athletic values are welcome and favorable to the organization (ILO, 2015); namely, if job applicants possess these values, they were more likely to gain job opportunities. Moreover, management studies have shown preliminary credence in associating the athletic participation with the job attainment. For example, athletic participation is assumed to foster stress-coping skills (Hahn et al., 2011), to enhance teamwork cohesion and team spirit (Haislip, 2014), and to promote performance and goal-orientation (Barron et al., 2000; Ewing, 1998). Although different in nature, prior studies have implied a joint message that athletic participation is a favorable value to the organization. As such, we propose the following hypothesis:

H1. Athletic participation is a preferable character in recruitment.

Following the explanation of the first hypothesis, we are keen to advance the knowledge of athletic participation by analyzing its implications on recruitment. We assume that athletic participation is relevant to the wage, an important aspect of recruitment, with the rationale below: i). Ewing (1995 & 1998) indicates that former black male athletes receive greater wages than their counterparts, such as applicants with non-athletic background. Ewing claims that the wage-evaluation procedure (*part of the recruiting practices*) is biased by the applicant's background, and that athletic participation on schooldays has merits on career opportunities and wages later on; ii). social capital boosts the earnings through social capital accumulation and networking effects; for instance, social capital acts as the networks of relationships among people who live and work

in a particular society—these people share, build and benefit the resources altogether; namely, they invest in the network and benefit from it (Aguilera, 2005). Athletes value social capital as it supports their team achievement and joint goal (win), and such values are related to their career development activities, such as job opportunity and package information sharing (Novak et al., 2020); and, iii). scholars indicated that graduates with athletic experiences receive 4% higher annual incomes than those with no-athletic experiences, and that athletic participation on schooldays enhances the development of discipline, confidence, and motivation, which in turn helps promote their career success and salary later on (Barron et al., 2000; Long & Caudill, 1991).

To summarize, although prior studies have adopted three different perspectives to explain the significance of athletic participation (i.e. athletic background, social capital and relevant sport experiences), they have conveyed a joint message that athletic participation is vital to the remuneration. Following the same logic, we may deduct that athletic participation is associated with the wage growth (pay progression). That is: the more athletic participation one possesses, the higher wages one may get. As such, we propose:

H2. Athletic participation is positively correlated with wages.

### ***Profession and athletic-participation-preference***

We have described the origin and formation of athletic-participation-preference (APP) in Introduction (e.g. Ewing et al., 2002; Winger & White, 2015). We have also adopted stereotype theories to discuss why APP affects fair recruitment, causing further ethical concerns in candidate selection and appointment (*c.f.*, the effect of stereotype: LaViolette & Silvert, 1951). Following this line of research, we wonder what could be done to prevent APP, as the answers would be informative and valuable, helping inform APP intervention strategies and restore fair recruitment.

To continue this line of research, we believe it is imperative to discuss whether profession prevents APP, along with the following reasons. To begin with, recruitment is a type of profession, covering the overall process of sourcing, selecting, shortlisting, and interviewing applicants for the organization (Connerley, 1997; Lavanchy et al., 2023). A professional recruiter must possess recruitment knowledge and skill-sets, including the awareness of equality, diversity and inclusion in recruiting practices (Kingston, 2022).

Next, general managers are not necessarily good recruiters, as not all managers possess recruiting knowledge and skills (ILO, 2015); more importantly, employee recruitment is a professional business, in which

professional recruiters must possess ample fair recruitment knowledge and/or have accumulated substantial recruiting experiences and skills (Kingston, 2022). Professional recruiters have received proper recruitment education and trainings, such as anti-discrimination workshops and ethics awareness trainings (Derous et al., 2021), so they are capable in delivering recruiting practices without discrimination.

Moreover, the phenomenon of APP is derived from the stereotype effect, and stereotypes are known to affect perception (Jung et al., 2014), judgment (De Dreu et al., 1995) and behavior (Judd & Park, 1993). Fortunately, scholars have found that vocational programmes, such as career trainings and ethics awareness workshops, help decrease the vulnerability to stereotypes (Christine et al., 2021; Liaw et al., 2014). Through the diversity management policy, managers can also decrease the possibility of discrimination in their recruiting practices (Hennekam et al., 2019). In other words, although APP is the outcome of stereotype effect, APP's influence can still be managed and reduced by other means, such as vocational programmes and diversity management policy. Following this logic, we therefore deduce that professional recruiters shall not be liable to APP, because they have accumulated anti-stereotype knowledge through recruiting practices and training programmes (*see the importance of trainings in*: Connerley, 1997; Derous et al., 2021). Based on the deduction above, we propose:

H3. Professional recruiters are less prone to the athletic-participation-preference.

### ***Athletic values (team spirit, goal-orientation) and APP***

Athletic values, *also known as* sport values, are the values that people believe, respect and practice in relation to sport (Bowker, 2006). Coincidentally, athletic values (e.g. teamwork, mutual respect, self-belief & determination) are commonly valued and applied into the employee development and management practices. For instance, athletic values are often integrated into human resources management (as training & motivational tools), and communication policies (Pichot et al., 2009), as well as the implementation of corporate social responsibilities (Smith & Westerbeek, 2007). Athletic values are many and vary, but two unique values (*team-spirit* & *goal-orientation*) have drawn our attention, with the following rationale.

To begin with, extant literatures have mixed views about the relationship between athletic values and their implications, but scholars generally believe that *team-spirit* and *goal-orientation values* both have consistently shown positive influence on teamwork and overall performance (Celse et al., 2017; Garcia-Mas et al., 2009). Next, team spirit is like the pride

and loyalty that shared by all members, in which all members believe they are the best and want their team to be the best (Haislip, 2014). Higher team spirit contributes to team loyalty (Alchian & Demsetz, 1972) and team cooperation skills (Cabane, 2010). Moreover, goal-orientation is an individual disposition towards developing or validating one's ability in achievement settings (VandeWalle, 1997). Strong goal-orientation is found to facilitate teamwork skills (Cabane, 2010), team development and management (Pfeifer & Cornelißen, 2010), team commitment and overall performance (Barron et al., 2000).

Although different in nature, prior studies have implied that athletic values are essential in the workplace, benefiting employees, teams and their organizations. Individuals with '*team-spirit and goal-orientation values*' are important to the management, as these two values help facilitate the implementation of managerial policies and practices. Following this logic, we deduce that team-spirit and goal-orientation values are related to the athletic-participation-preference (APP). Our proposition is: if people appreciate '*team-spirit and goal-orientation values*', they are more likely to recognize the merits of both values. When people recognize both values, they would show more APP during the recruiting practices. As such, we propose:

H4. Team spirit and goal-orientation are positively correlated with the athletic-participation-preference.

## Method

### Sample

The sample comprised 'university students' and 'recruiters'. Students were invited from a French university (author's university), and only the students without recruiting experience were selected to join the research. We researchers described these students as '*student recruiters*', as they were invited to play recruiting games in the research (details to follow). The recruiters were the alumni from the same university, and only those with at least two-year recruiting experiences were selected to join the research. We described these alumni as '*professional recruiters*'.

In line with the institutional ethical guidelines, both students and alumni were invited to join the research. Based on the institution-approved database, we emailed a '*participant information letter*' to all potential participants. For the assurance of research rigor, the letter explicitly explained that only native French speakers were invited to join the research, aiming to avoid the language barriers and misunderstanding when reading the research instructions. Once participants agreed to join our research, we emailed them with further instructions, such as research invitation letter and the web-link for signing the consent forms.



We adopted several strategies to reduce social desirability effect in data collection (Arnold et al., 1985; Jarrett, 2021; Nederhof, 1985). For instance, when participants agreed to join the survey, we emailed each individual with unique web-links (password-protected) to explain our research aim, contact details, informed consent, confidentiality policy and voluntary participation. Participants then responded to the questions on the platform, ensuring the anonymity of their responses. The participation was voluntary and did not include financial incentives. After the research, we appreciated all participations and offered opportunities for post-research feedback.

### Design

During the pandemic, field experiments were infeasible, so we designed an online experiment for the research purpose, in which surveys were administered through an e-survey platform (Google Forms). All instructions and survey questions were delivered in French, as all research participants were native French speakers.

For the purpose of data analysis, we adopted a between-group design for the research. To be exact, student recruiters possessed no recruiting experiences and received no training in dealing with stereotypes (*we categorized these student recruiters into the control group*), whereas professional recruiters possessed at least two-year recruiting experiences and received fair recruitment trainings (*we categorized these recruiters into the experimental group*). Simply put, we adopted the between-group design (control group vs experimental group) to examine the heterogeneity and homogeneity between two concerned groups (*see similar strategy in: Hertwig & Ortmann, 2008*). More importantly, using a between-group design helped researchers identify which group was more prone to APP.

The research sample comprised 267 participants, including: 137 student recruiters and 130 professional recruiters (Table 1 presents the population ratios at the group-level, including sample age, gender, nationality and athletic participation). In terms of sample-heterogeneity, professional recruiters were older than student students ( $Z = -11.501$ ,  $p < 0.01$ ), but there was no difference between two groups in gender ( $\chi^2 = 1.94$ ,  $p = 0.16$ ), athletic participation ( $\chi^2 = 1.86$ ,  $p = 0.17$ ) or French nationality ( $\chi^2 = 2.39$ ,  $p = 0.12$ ).

We estimated the sample size through a pilot study ( $N = 17$ ), in which we acquired the effect size ( $ES = 0.36$ ) by comparing athletic-group to non-athletic-group. We then adopted the following parameters ( $ES = 0.36$ ,  $\alpha = 0.05$ ,  $\text{power} = 0.95$ ) to calculate the minimum sample size (191), i.e. the baseline for recruitment (Guala, 2005). The research sample was of 267 and exceeded the baseline, hence meeting the required sample size.

**Table 1.** Research sample ( $N=267$ ).

Sample (N)	Student recruiters	Professional recruiters	Total
Sample size	137	130	267
Age	22.22 (SD 2.52)	31.68 (SD 8.84)	26.83 (SD 7.97)
Female	55.47%	63.84%	59.55%
French nationality	92.70%	96.92%	94.75%
Athletic participation	76.64%	69.80%	73.03%

### **Experimental procedure**

Prior experiments often analyzed recruitment discrimination by creating fictitious résumés and fake social-network accounts, but such deceptive methods were subject to criticism, particularly when participants were given misleading or false information, leading to ethical concerns and undesirable experimental outcomes (Hertwig & Ortmann, 2008). Therefore we adopted a transparent approach in studying discrimination this time, in which the experiment retrieved a job advert from author's company (i.e. real job vacancy), and participants were invited to write ideal résumé for the job (i.e. real résumés). The removal of deception and adoption of transparent approach help improve the ecological validity of data collection (Zizzo, 2010).

Both student recruiters and professional recruiters were treated as *participants* in experiment, with the instructions below. To begin with, participants were presented to a scenario, in which they acted as recruiting officers (i.e. recruiting a sales manager). Participants was tasked to write a résumé of the ideal candidate; namely, writing a résumé that matched the job requirement (shown below). To help participants understand the job requirement, the following information was given:

You are a recruiting officer for an international company, which sells medical devices and services to the health industry. The company specializes in medical products, research development and commercialization of products. Aligning with the business growth, your company has planned to recruit a sales manager. Job requirements are outlined below:

#### **Post: Sales Manager**

The sales manager will lead and manage the sales team, delivering the business objectives and maximizing the company revenues. The position will be based in Ile-de-France (France) and business travelling across business sites (Dijon, Bureaux, Massey) is expected. Specific requirement includes:

- Experience in the implementation of business strategies:
- Experience in exploring new customers and maintaining quality relationship with customers (hospital centers, health clinics, care homes).
- Experience in customer servicing and handling customer complaints.

- Ability to communicate with sector leaders and organize training meetings of medical staff.
- Ability to promote products (inc. clinical trials) and seek support from congressmen.
- Ability to execute business objectives and excellence, including the development and facilitation of corporate strategies and technologies.

In addition, participants were given ten personal characters to describe the ideal candidate (see below). Each character had several choices, and participants selected one choice only. To be exact, only the fifth (hobby) and sixth (wage) characters were used for the analytic purpose, as others acted as filters, aiming to alleviate experiment-demand-effect (Zizzo, 2010). In the filter-design, participants could not figure out the actual research purpose, further reducing the social desirability bias (Hertwig & Ortmann, 2008). The ten characters are shown below:

- *Gender: Female, Male, or NRJ* (not relevant to the job).
- *Age band: Younger than 30 years old, 30-45 years old, older than 45 years old, or NRJ.*
- *Nationality: French, European, Others, or NRJ.*
- *Education: Business related subject, Engineering related subject, or NRJ.*
- *Hobby: Athletic participation (e.g. football, tennis), cultural participation (e.g. music, art), no hobby, or NRJ.*
- *Wage: €\_\_\_ per annum (Propose a figure from €36,000 to €80,000).*
- *Spoken language: \_\_\_\_\_; \_\_\_\_\_; \_\_\_\_\_ (Up to three best spoken languages).*
- *Level of spoken language: \_\_\_\_\_; \_\_\_\_\_; \_\_\_\_\_ (When entering a spoken language,*
- *please specify the level, i.e. Basic, Intermediate, or Professional).*
- *Working experience: < 2 years, 2-5 years, 5-10 years, or > 10 years.*
- *International working experience: Essential, non-essential, or NRJ.*

After the experiment, participants responded to several general demographic questions, such as age, gender, education, and nationality. Four athletic questions were also asked, including: i). do you practice any sport (yes/no), ii). for how many years (number of years), iii). are you a member of any sport club/licensed gym (yes/no), and, iv). what is the importance of sport in your opinion (1=not important, 7=very important). In addition, we asked professional recruiters two questions: i). years of working experience (i.e. general work experience) and, ii). years of HR experience (i.e. expertise experience). We arranged these questions after

the experiment, aiming to reduce the priming-effect that may affect participants' behavior in research (Ashford & Jackson, 2010).

### ***Manipulation of the conditions (athletic values)***

We designed three conditions to examine whether athletic values were related to APP in recruitment. We referenced the manipulation framework from similar studies, which manipulated the conditions through stages (Celse et al., 2016; Gino et al., 2009). Details follow:

Stage One: All participants received a standard message about the candidates (i.e. job applicants):

*'Candidates shall possess negotiation- and organizational-skills, with a vigorous attitude about the job.'*

Stage Two: Participants received different messages, subject to their allocated conditions:

*'Team-spirit is a must (Condition 1),*

*'Goal-orientation is a must (Condition 2),*

*'...(no message)... (Condition 3).'*

Based on the manipulation framework, Condition 1 highlighted the value of team-spirit, Condition 2 highlighted the value of goal-orientation, whereas Condition 3 acted as a comparison baseline.

### ***Manipulation check***

The manipulation framework (conditions, stages) was designed to avoid causality bias, in which participants were randomly allocated to one of the three conditions and one participant attended one condition only (*see similar design in: Celse & Chang, 2019; Gino et al., 2009*). We also examined whether participants connected the two (e.g. conditions & sport values in recruitment) through a post-experiment survey. Results showed that no participant made such connection, indicating the chance of causal bias was slim and the manipulation was successful.

## **Results**

### ***Analytical strategy***

We adopted SPSS v.26 to examine the research hypotheses. For instance, we adopted heterogeneity tests to examine the uniform distribution of participants' answers, and we adopted chi-squared tests to compare the differences between professional recruiters and student recruiters. Next,

we adopted Fisher exact tests to compare the proportions across different conditions, and we adopted Kruskal-Wallis tests to compare the means of research variables across conditions. Finally, we conducted binary logit regression to analyze whether recruiters were prone to APP and what variables affected participants' preferences in recruitment. Details follow:

### **Hypothesis 1**

To examine whether athletic participation was a preferable character in recruitment, we analyzed the frequency of four choices in hobby (Table 2). At the aggregated level (i.e. combining 137 student recruiters and 130 professional recruiters), we found that 40.07% of all participants selected athletic participation when writing the résumés. The distribution of four choices was uneven (Heterogeneity test:  $\chi^2(3) = 64.56, p < 0.01$ ), indicating that participants did not make their choices randomly. Specifically, 40.07% of the sample selected athletic participation as a hobby for the candidate, 48.31% selected NRJ (i.e. hobby was not relevant to the job), and the difference between the two was not significant (Fisher exact test,  $p = 0.067$ ). Yet, athletic participation was more selected than cultural participation (Fisher exact test,  $p < 0.001$ ) and No hobby (Fisher exact test,  $p < 0.001$ ). Then we conducted further analyses at the participant level. Details follow:

At the level of student recruiters, the distribution of four choices was uneven (Heterogeneity test:  $\chi^2(3) = 33.12, p < 0.01$ ), indicating that participants did not make their choices randomly. Specifically, 48.17% of the sample selected athletic participation, 34.30% selected NRJ, and the difference between the two was significant (Fisher exact test,  $p < 0.05$ ). These figures explained that student recruiters preferred athletic participation.

At the level of professional recruiters, the distribution of four choices was uneven (Heterogeneity test:  $\chi^2(3) = 31.43, p < 0.01$ ), indicating that participants did not make their choices randomly. Specifically, 31.54% of the sample selected athletic participation, 63.07% selected NRJ, and the difference between the two was significant (Fisher exact test,  $p < 0.01$ ). These figures explained that recruiter-participants preferred NRJ.

To sum up, in the eyes of student recruiters, athletic participation was a preferable character in recruitment. However, in the eyes of professional recruiters, athletic participation was not a preferable character. As such, the first hypothesis was partially supported.

**Table 2.** Preferable character.

(Choices of the hobby)	Student recruiters	Professional recruiters	Total
Athletic participation	48.17%	31.54%	40.07%
Cultural participation	16.05%	4.61%	10.48%
No hobby	1.46%	0.77%	1.12%
Not relevant to the job	34.30%	63.07%	48.31%

## Hypothesis 2

To examine whether athletic participation was related to wages, we focused on participants' hobby characters, in which we re-grouped characters for data analysis. That is: *Group 1* (participants with athletic-participation) versus *Group 2* (participants without athletic-participation). As it is shown in [Table 3](#), at an aggregated level, the wages from *Group 1* ( $M=42,182.24$ ) and the wages from *Group 2* ( $M=42,096.88$ ) were not significantly different (Kruskal Wallis test:  $H(1) = 0.043$ ,  $p=0.83$ ). Among the professional recruiters, the wage from *Group 1* ( $M=43,180.49$ ) and the wages from *Group 2* ( $M=43,179.17$ ) were not significantly different (Kruskal Wallis test:  $H(1) = 0.048$ ,  $p=0.83$ ). Among the student recruiters, the wages from *Group 1* ( $M=41,562.12$ ) and the wages from *Group 2* ( $M=40,739.44$ ) were not significantly different, either (Kruskal Wallis test:  $H(1) = 1.11$ ,  $p=0.29$ ). These statistical figures may look sporadic but actually convey a joint message that there was no wage difference between two groups of participants. In other words, athletic participation was not correlated with wages. Thus, the second hypothesis was declined.

Additionally, we conducted further analysis to examine whether other characters predicted wages. As it is shown in [Table 4](#), experimental conditions, participants' age, education, gender, sport practicing, gym membership and ratings of sport importance did not predict wages. Namely, none of these characters was related to wages.

## Hypothesis 3

We conducted a series of tests to examine the third hypothesis. Details follow:

To begin with, we discovered that 40.07% of the participants selected athletic participation. Specifically, 48.17% of the student recruiters selected athletic participation, 31.53% of the professional recruiters selected athletic participation, and there was a difference between student recruiters and professional recruiters (Kruskal Wallis test,  $H(1) = 7.66$ ,  $p<0.01$ ).

Next, professional recruiters selected more NRJ than athletic participation (two-sample test of proportions,  $p<0.001$ ), cultural participation (two-sample test of proportions,  $p<0.001$ ) and no hobby (two-sample test of proportions,  $p<0.001$ ). These figures implied that, in the eyes of professional recruiters, athletic participation was not a relevant character

**Table 3.** Analysis of the proposed wages.

	Student recruiters	Professional recruiters	Total
Group 1 (participants with athletic-participation)	41,562.12 (SD: 6,225.52)	43,180.49 (SD: 7,868.01)	42,182.24 (SD: 6,910.26)
Group 2 (participants without athletic-participation)	40,739.44 (SD: 6,416.98)	43,179.17 (SD: 6,493.98)	42,096.88 (SD: 6,553.48)

**Table 4.** Regression analysis and outcomes (DV = proposed wages).

	Model 1	Model 2
Experimental conditions†	822.58 (478.89)	752.45 (646.04)
Years of general work experiences (RP)‡	–	15.76 (1,237.81)
Participants' age	–	19.13 (87.13)
Participants' level of education	–	–88.45 (911.55)
Participants' gender	–	–1,775.99 (1,105.53)
Participants' sport practicing	–	–3,600.98 (2,144.67)
Participants' gym membership	–	–1,519.59 (1,238.02)
Participants' ratings of sport importance	–	1,457.19 (1,229.92)
Constant	39,460.58 (1,081.57)	39,095.07 (3,345.04)
Nb. Observations	267	175
Adj. R-Squared	.03	.097

†Three experimental conditions were converted into binary figures in the regression analysis. Specifically, 0 = baseline condition, 1 = team-spirit condition, and 2 = goal-orientation condition.

‡RP = Professional recruiters only.

for the candidates. That is to say, professional recruiters were not prone to the athletic-participation-preferences (APP).

On the contrary, student recruiters selected more athletic participation than cultural participation (two-sample test of proportions,  $p < 0.001$ ), no hobby (two-sample test of proportions,  $p < 0.001$ ), and NRJ (two-sample test of proportions,  $p < 0.01$ ). These figures implied that, in the eyes of student recruiters, athletic participation was the most selected character for the candidates. Namely, student recruiters were more prone to APP (when compared against professional recruiters).

Moreover, we compared the selection of athletic participation across three conditions. As it is shown in Table 5, in condition 1 (team-spirit was highlighted), student recruiters (45.23%) selected more athletic participation than professional recruiters (39.39%). In condition 2 (goal-orientation was highlighted), student recruiters (44.00%) selected more athletic participation than professional recruiters (27.58%). In condition 3 (baseline), student recruiters (55.55%) selected more athletic participation than professional recruiters (30.76%). Finally, we examined whether experimental conditions affected the selection of athletic participation, and the answer was negative (Kruskal Wallis test,  $H(2) = 1.83$ ,  $p = 0.40$ ).

Overall, across three conditions, student recruiters consistently selected more athletic participation than professional recruiters, indicating that the third hypothesis was supported.

#### Hypothesis 4

By running regression analyses, we identified a difference between professional recruiters and student recruiters ( $F(1, 261) = 6.73$ ,  $p < 0.01$ ) in predicting athletic participation, but there was no difference among three experimental conditions in predicting athletic participation ( $F(2, 161) = 0.66$ ,  $p = 0.52$ ). The interaction effect (i.e. 2 types of recruiters versus 3 conditions) did not predict athletic participation either ( $F(2, 261) = 0.75$ ,

**Table 5.** Selection of athletic participation.

(conditions)	Student recruiters (137)	Professional recruiters (130)	Total (267)
Condition 1 (Team-spirit)	45.23%	39.39%	42.66%
Condition 2 (Goal-orientation)	44.00%	27.58%	35.18%
Condition 3 (Baseline)	55.55%	30.76%	44.04%
(all conditions)	48.17%	31.53%	40.07%

$p=0.48$ ). As it is shown in Table 6 (*Model 1*), experimental conditions did not predict athletic participation ( $\beta=-0.17$ ,  $p=0.38$ ), indicating that participants showed no difference in predicting athletic participation among three conditions. That is, both athletic values (team spirit & goal-orientation) could not predict athletic participation, implying that these values were not related to the athletic-participation-preference (APP). As such, the fourth hypothesis was declined.

Additionally, the types of recruiters predicted athletic participation ( $\beta=-0.69$ ,  $p<0.001$ ). Compared to the professional recruiters, student recruiters selected more athletic participation ( $F(1, 261) = 6.73$ ,  $p<0.01$ ), indicating that student recruiters perceived athletic participation more important than professional recruiters (This finding was coherent with H3). Then we added more characters to the regression analysis in Table 6 (*Model 2*). Interestingly, only two characters predicted athletic participation. These were: *ratings of sport importance* ( $\beta=4.92$ ,  $p<0.001$ ) and *participants' age* ( $\beta=-0.07$ ,  $p<0.01$ ).

Our proposition is: “*Ratings of sport importance*” and “*athletic participation*” both are related to sport-appreciation. The correlation between the two is reasonable and thus does not require further clarification. However, it is novel to find that participants' age counter-predicted athletic participation. That is, younger age predicted more selection ( $\beta=-0.07$ ,  $p<0.01$ ), indicating that the selection of athletic participation decreased when age increased. Compared to the older participants, younger participants selected more athletic participation (*Odds-Ratio* = 9.28). This finding is rather interesting and deserves further discussion.

## Discussion

Fair recruitment matters, as it affects everyone in the workplace. Fairness plays a vital role in recruitment, and scholars have proved its imperative-ness through different lens, such as staff retention management (Abbasi et al., 2022), discrimination intervention (ILO, 2015), to gender issues (Hangartner et al., 2021; Koval & Rosette, 2021). Having said this, however, the phenomenon of athletic-participation-preference (APP) has emerged and affected fair recruitment, and scholars have expressed their concerns about it (Ewing, 1995; Lechner & Sari, 2015; Rooth, 2011).



**Table 6.** Binary-logit analysis and outcomes (DV=athletic participation).

(Effect)	Model 1		Model 2	
	Coefficient (Std. Error)	Odds Ratio	Coefficient (Std. Error)	Odds Ratio
Experimental conditions†	-0.17 (.15)	.79	-0.20 (.35)	.82
Types of participants‡	-0.69 (.26)***	.48	.27 (.76)	1.31
Participants' age	-	-	-0.07 (.03)**	.93
Participants' education	-	-	-0.83 (.43)	.44
Participants' gender	-	-	.77 (.62)	2.16
Participants' proposed wages	-	-	.00 (.00)	1.00
Years of HR experiences	-	-	.90 (.78)	2.46
(Professional recruiters only)				
Participants' sport practicing	-	-	-0.86 (.62)	.42
Participants' gym membership	-	-	.00 (.79)	1.00
Participants ratings of sport importance	-	-	4.92 (.78)***	136.91
Constant	.27 (.35)	1.58	-0.15 (1.46)	.86
Nb. Observations	267		175	
Adj. R-Squared	.03		.56	

†. Three experimental conditions were converted into binary figures in the analysis (0=baseline condition, 1=team-spirit condition, and 2=goal-orientation condition).

‡. Participants: 0=Professional recruiters, 1=Student recruiters.

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.01$ .

To continue this line of research, we conducted a new research and discovered two unique findings: i). student recruiters showed more APP in recruitment than professional recruiters; and, ii). APP did not imply higher wages but declined with ages. This article now turns to explain the value of new discoveries, along with the implications of research findings on recruitment theories and fair recruiting practices.

### **Theoretical implications**

Prior studies indicate that former athletes or athletic candidates are preferable in recruitment, suggesting that athletes possess athletic values, so they are more favorable in the job market, such as gaining more interview opportunities and benefiting higher levels of employability (Lechner & Downward, 2017; Lechner & Sari, 2015). People with athletic participation on schooldays are also likely to receive higher wages (Ewing, 1995; Long & Caudill, 1991). Prior studies are crucial, as their findings have clarified the role and merits of athletic participation in recruitment. Yet, our research findings are innovative and not congruent with prior studies, bringing new insights to the literatures of “athletic participation and recruitment”. Research findings and their implications on knowledge advancement are outlined below.

To begin with, the influence of athletic participation in recruitment is not universal, at least in the current research that student recruiters and professional recruiters have expressed different views. Specifically, only student recruiters show athletic-participation-preference (APP) in recruitment. Different from the previous research which highlights the athletic

values in recruitment (Celse et al., 2017), our research has provided a counter-argument that professional recruiters do not show APP. Professional recruiters are capable of practicing fair-recruitment and regarding athletic participation as irrelevant factor. This finding may be further clarified by three reasons: i). APP is a stereotype-driven phenomenon (as discussed in literature review). As professional recruiters have accumulated anti-stereotype knowledge through career experiences (Christine et al., 2021; Liaw et al., 2014), they are thus less liable to APP; ii). scholars indicate that onsite education and trainings guide recruiters evaluate the efficacy of different recruiting policies (Abbasi et al., 2022; ILO, 2015); namely, the education and trainings may help professional recruiters deliver a fair, smooth and successful recruitment process; and, iii). Experience may play a vital role in intervening the influence of APP in recruitment, which as been supported by the research outcome that ‘less-experienced recruiters’ (i.e. student recruiters) show more APP than ‘more-experienced recruiters’ (i.e. professional recruiters).

Next, the influence of athletic participation in recruitment is not consistent. Our research findings are against prior studies which have praised the consistent positive impact of athletic participation on salary (Ewing, 1995; Long & Caudill, 1991), job opportunity and career potential (Lechner & Downward, 2017; Lechner & Sari, 2015). In the current research, APP is not found to affect wage, and it is negatively correlated with age. Simply put, APP does not boost wage, and may increase when the age decreases, or APP may decrease when the age increases. These findings could be further interpreted by two possibilities: i). there might be some hidden factors that regulate the APP-wage relationship, such as halo effect—the tendency for an impression created in one area to influence opinion in another area (Gibson & Gore, 2016). Following the logic of halo effect, we may deduce that actual athletic performance affects wage; that is, better athletic performance (either present or past) can lead to higher wage; and, ii). the ‘APP-age correlation’ may imply the imperativeness of time, as people need time to acquire fair recruitment knowledge and learn relevant recruiting skills, such as participating recruitment trainings and attending ethics awareness workshops, which are vital to the implementation of fair recruitment (Connerley, 1997; Derous et al., 2021). Following the logic of time imperativeness, we may deduce that age resists APP, as age offers time for the development of recruitment knowledge and practicing skills. Duly, both possibilities are hypothetic in nature and require further examination.

In addition, prior studies indicate that athletic values are popular and receive great attention in the workplace, and managers also apply various athletic values to their practices, such as teamwork in personnel management policies, mutual respect in communication policies, and integrity in

corporate social responsibility management (Pichot et al., 2009; Smith & Westerbeek, 2007). In the current research, we have examined two specific athletic values (i.e. team-spirit & goal-orientation) and analyzed their roles in recruitment. Surprisingly, both values are found irrelevant to APP; that is to say, both team-spirit and goal-orientation do not increase or decrease APP. The phenomenon of irrelevance is unique and different from prior studies, hence deserving further discussion.

Our viewpoint is: team-spirit and goal-orientation may not confine themselves in sport field; for instance, team-spirit may appear in student cohorts, group members and training camps, whereas goal-orientation may emerge at individual-, teamwork- and organizational-levels (Barron et al., 2000; Pfeifer & Cornelissen, 2010). Following the same logic, we may deduce that team-spirit and goal-orientation exist in both sport and non-sport fields, and that team-spirit and goal-orientation are no longer “athletic-only values”. As such, team-spirit and goal-orientation may not become prime values in the workplace, hence showing irrelevance to APP.

### ***Practical implications***

Fair recruitment is essential but affected by stereotype effect, such as the athletic-participation-preferences (APP) identified in the current research. The impact of stereotype effect on recruitment is notorious, as it discriminates job applicants (Hangartner et al., 2021; Turek & Henkens, 2020), infringes employee’s rights (ILO, 2015), and damages organizational interests (Abbasi et al., 2022). Following this line of research, how to ‘tackle APP’ has become an imminent and important theme to the recruitment managers. Based on the research findings, we would like to propose three strategies, aiming to tackle the impact of APP on recruiting related activities.

Firstly, the consequence of unfair recruitment is destructive to the organizational development and performance, affecting the employees, managers and their clients (Abbasi et al., 2022; Chang et al., 2023; Hangartner et al., 2021). Based on the research findings, we encourage recruitment managers to acquire their knowledge of fair recruitment by attending the recruitment trainings, such as anti-discrimination workshops (Derosus et al., 2021) and anti-stereotype programmes (Connerley, 1997). As it is shown in the current research, student recruiters and professional recruiters have expressed different viewpoints of APP, implying that recruitment trainings are still imperative and help restrain APP in recruitment (*see further discussion in*: Derosus et al., 2021; Xu & Chen, 2022).

Secondly, age is found to be related with APP in the current research, implying that age may become a trigger to the unfair recruitment. To

deal with the age related factors, we encourage the recruitment managers to apply AI (Artificial intelligence) to their recruitment practices, particularly when AI is renowned for more accurate and efficient data analysis (an important element to the fair recruitment; Chang, 2021). The AI-empowered recruitment is operated through multiple stages of measurement and assessment, allowing cross-reference checks, reciprocal comparison and social-desirability checks, reducing the bias and errors during the recruiting process (Chang & Cheng, 2023). Yet, AI-empowered recruitment has its weakness, such as causal reasoning bias, gender discrimination risk, and adverse reactions from the employees, which may undermine the recruitment fairness (Chang, 2020; Dastin, 2018; Tambe et al., 2019). Prior to the implementation of AI-empowered recruitment, therefore, we advise managers to consider ‘dry-runs or pilot’, so any negative consequence could be identified and eradicated in time.

Finally, athletic values are appreciated in the job market, such as teamwork, mutual respect and integrity (Pichot et al., 2009; Smith & Westerbeek, 2007). Although the concerned values (i.e. team-spirit and goal-orientation) are not found to be related with APP in the current research, there might be other values which may trigger APP and then affect the fair recruitment. Inspired by the research findings, we therefore advise managers to write the personal specification document (or job profile) with caution, and pay attention to any job-required values. At least, the values on the job specification document should not trigger any sense of stereotype effect, such as APP discussed in the current research. Alternatively, the personal specification document should avoid the use of expected values but focus on the job-required factors, such as ‘*up to five hours overtime are expected per week*’ rather than ‘*overtime is valued*’.

### **Limitation and suggestions for future research**

Only one occupation (sales manager) is analyzed in the current research, but employees with different characters (e.g. hierarchy, contract) may behave differently at work (Celse et al., 2016; Chang & Lu, 2009; Iteboje & Chang, 2021). To rectify this limitation, future studies may recruit participants from different occupations and industries. Researchers may also manipulate sample characters, such as hierarchy (managers vs employees), and contract (permanent- vs agent-workers), exploring whether sample characters affect the perception of athletic-participation. Moreover, our research sample comprises native French speakers only, but the perception towards the importance of doing sports may vary from one country to another. To overcome this limitation, we encourage future replication of our study by using different pools of subjects, such as participants from different countries and cultures.

Next, only two athletic values are examined in the current research, and there might be other values affecting the perception of athletic participation. For instance, self-efficacy seems a pertinent value, as it links to one's belief in his/her capacity to execute behaviors necessary to produce specific performance attainments (Bandura, 2010). Our proposition is: measuring the proximal outcomes of self-efficacy is more sensible and expedient in recruitment, because it helps recruiters evaluate how job applicants demonstrate their self-efficacy at work, such as team-spirit and goal-orientation (both are measured in the current research). Duly, we still encourage future studies to consider other values and analyze their implications on APP. For instance, future studies may wish to manipulate the levels of athletic participation and observe how such levels affect the wage setting and/or variance in salary increment.

Finally, experimental research design has merits, such as variable manipulation (Levitt & List, 2007) and variable causality examination (Guala, 2005). Yet, gathering data in experiments may compromise the ecological validity by its approximation of real-world situations, in which the responses of participants are collected and analyzed in an arbitrary mode (Hughes & Huby, 2004). To overcome these drawbacks, future studies may consider different data collection modes (e.g. more narrative or phenomenological approach), avoiding the bias of arbitrary measurement in data analysis and interpretation (Falk & Heckman, 2009).

## **Conclusion**

Fair recruitment matters, as it affects employees, managers and the organization. The phenomenon of athletic-participation-preference (APP) concerns both scholars and managers, affecting the policy and implementation of fair recruitment. Drawing on the stereotype theories, the current research clarifies the formation and implications of APP in recruitment, along with three unique findings. Firstly, the influence of athletic participation in recruitment is not universal, as professional recruiters and non-professional recruiters express different views. Secondly, the influence of athletic participation in recruitment is not consistent. APP does not boost wage, and the APP is perceived differently between age groups. Finally, team-spirit and goal-orientation are not relevant to APP, as both values exist in both sport and non-sport fields. Research findings have implied that profession (e.g. career trainings, education and ethics workshops, and recruiting experiences) is still crucial to the fair recruitment, alleviating the impact of athletic-participation-preference in recruitment.

## Acknowledgements

Authors would like to thank Arnaud Mirandé's for his assistance in questionnaire distribution and collection. Authors would like to express sincere gratitude to two colleagues Professors S Shadev and P Scarf who offered valuable comments to an earlier version of this paper. The insight provided by colleagues and their constructive criticism has greatly improved the paper.


## Disclosure statement


No potential conflict of interest was reported by the authors.

## Statement

The manuscript is original and is not under consideration or published elsewhere. The author received no financial support for the research, authorship, and publication of this article. Some parts of the manuscript were discussed in the institutional research seminar (2023), but the full-text of manuscript has not been published. The research reported was conducted in accordance with the Institutional Research Ethics Guideline.

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## Data availability statement

The data that support the findings of this study are available on request from the corresponding author (KC). The data are not publicly available due to their containing information that could compromise the privacy of research participants. Raw data were generated at the ESSCA School of Management. Derived data supporting the findings of this study are available from the corresponding author (KC) upon reasonable request.

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