

THE INTERNATIONAL LANGUAGE OF METAPHORS: A CASE STUDY OF HIGHER EDUCATION STUDENTS IN SPORT AND PHYSICAL ACTIVITY IN ECUADOR AND SPAIN

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ABSTRACT: International organisations have warned that, because of large gender differences in sport and physical activity (SPA), girls and women miss the opportunity to enjoy the recognised health benefits of sport and career opportunities in this field. The aim of the study is to analyse women and men's personal perceptions of SPA and the meaning they give to it in their lives. This qualitative and comparative study uses a metaphorical approach. It compares and analyses the metaphorical devices used by students of Physical Activity Sciences at a Spanish university and a university in Ecuador. A total of 200 students participated in the study (n=110 men; n=90 women). The AQUAD software was used to process the data. The results show that both women and men perceived SPA as a need and a source of emotional health. No differences were found to support the premise that women are not predisposed to a sporting life. Rather, context was identified as the cause of the most significant differences in the perception of in the personal lives of both male and female students.

KEYWORDS: Sport; Qualitative research; Metaphors; Gender gap

A LINGUAGEM INTERNACIONAL DAS METÁFORAS: UM ESTUDO DE CASO DE ESTUDANTES DE EDUCAÇÃO SUPERIOR EM ESPORTE E ATIVIDADE FÍSICA NO EQUADOR E ESPANHA

RESUMEN: As organizações internacionais aconselham que, devido às grandes diferenças de género no desporto e na actividade física (DAF), as raparigas e as mulheres perdem a oportunidade de usufruir dos reconhecidos benefícios da actividade física e do desporto, para a saúde e, conseqüentemente das oportunidades de carreira neste domínio. O objetivo do estudo é analisar as percepções pessoais de mulheres e homens sobre a DAF e o significado que atribuem na sua vida. Este estudo qualitativo e comparativo utiliza uma abordagem metafórica. Compara e analisa os dispositivos metafóricos utilizados pelos estudantes de Ciências da Atividade Física de uma universidade espanhola e de uma universidade equatoriana. Um total de 200 alunos participaram do estudo (n=110 homens; n=90 mulheres). O software AQUAD foi utilizado para processar os dados. Os resultados mostram que tanto as mulheres como os homens percecionam a DAF como uma necessidade e uma fonte de saúde emocional. Não foram encontradas diferenças que sustentem a premissa de que as mulheres não estão predispostas a uma vida desportiva. Pelo contrário, o contexto foi identificado como a causa das diferenças mais significativas na percepção da DAF na vida pessoal de estudantes do sexo masculino e feminino.

PALAVRAS-CHAVE: Esporte e actividade física; Pesquisa qualitativa; Metáforas; Lacuna de género

EL LENGUAJE INTERNACIONAL DE LAS METÁFORAS: UN ESTUDIO DE CASO DE ESTUDIANTES DE EDUCACIÓN SUPERIOR EN DEPORTE Y ACTIVIDAD FÍSICA EN ECUADOR Y ESPAÑA

RESUMO: Las organizaciones internacionales han advertido que, debido a las grandes diferencias de género en el deporte y la actividad física (DAF), las niñas y mujeres pierden la oportunidad de disfrutar de los reconocidos beneficios para la salud del deporte y de las oportunidades profesionales en este ámbito. El objetivo del estudio es analizar las percepciones personales de las mujeres y los hombres sobre el DAF y el sentido que le dan en su vida. Este estudio cualitativo y comparativo utiliza un enfoque metafórico. Compara y analiza los dispositivos metafóricos empleados por los estudiantes de Ciencias de Actividad Física de una universidad española y una universidad del Ecuador. Un total de 200 estudiantes participaron en el estudio (n=110 hombres; n=90 mujeres). Se utilizó el programa informático AQUAD para tratar los datos. Los resultados muestran que tanto mujeres como hombres percibían el DAF como necesidad y fuente de salud emocional. No se encontraron diferencias que apoyaran la premisa de que las mujeres no están predispuestas a una vida deportiva. Más bien, el contexto fue identificado como el causante de las diferencias más significativas en la percepción del DAF en la vida personal de los estudiantes, tanto hombres como mujeres.

PALABRAS CLAVE: Deporte y actividad física; Investigación cualitativa; Metáforas; Brecha de género

INTERNATIONAL LANDSCAPE

The gender gap is found in all social realms. Specifically, various bodies such as the Spanish Ministry of Education, Culture and Sport, and the Institute for Women and for Equal Opportunities, as well as similar organisations in other countries such as the European Institute for Gender Equality and UN Women established in 2010, have often called attention to the gender divide, which is particularly pronounced in the sporting world. This has been

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a traditionally male environment in which existing barriers, constraints and discrimination indicate bleak prospects for women. As a result, the international community has repeatedly engaged in campaigns and made statements about the need to take action to bridge the gender gap.

Since the 1980s, various international organisations such as the High Council for Sport or the Women and Sport Commission of the International Olympic

Committee have been concerned about the narrow space allowed for women within the sporting context. In 2007, the United Nations submitted the report *Women 2000 and Beyond*, which specifically dealt with the issue (*Women, Gender Equality and Sport*). In 2012, UNESCO issued the report *Empowering Girls and Women through Physical Education and Sport*, which dealt with this topic in the introduction: 'We should be concerned about gender, girls and physical education because access and regular participation is a fundamental human

right' (UNESCO, 2012, p.1). In addition, in 2014, the UNESCO's Worldwide Survey of School Physical Education discussed Equity Issues in connection with gender and with disability.

In December 2015, the UN's Office on Sport for Development and Peace adopted a resolution, which reaffirmed the role of sport as a means to promote education, health, development and peace. In 2005, the United Nations General Assembly, together with the 50 participant states (only five of them from Latin America), decided to include the item 'sport for development and peace' in its agenda. The General Assembly resolution of 3 November 2006 emphasised the need to increase the participation of women in sporting activities, particularly through educational policies, as advised in the *2030 Agenda for Sustainable Development*.

In this vein, the Expert Group on Good Governance of the European Commission in February 2016 issued some *Recommendations on Gender Equality in Sport*. According to the *Special Eurobarometer Survey 412, on Sport and physical activity* (2014), men play more sport than women, especially in the 15-24 age group. The Study also reported that women are underrepresented in leadership roles in coaching, in the media and in decision-making positions in sport institutions. This is why it proposed that 'an integrated approach to equality can avoid sexist stereotypes and help create a positive social environment for all' (European Commission, 2016, p. 5).

The *Proposal for Strategic Actions 2014-2020*, produced by the Expert Group on Good Governance (European Commission, 2014), raised the importance of achieving gender equality in coaching, the role of the media in combating stereotypes, and the fight against gender-based violence. It proposed adopting gender-friendly strategies, providing ethical guidelines, and mainly, developing education and promoting female role models to encourage increased participation of girls and women.

In the light of the above proposals, it was decided to carry out a study that would provide some insights into how female university students perceive sport, in order to understand and analyse whether there were any gender differences involved in a particular situated context. It would be focused on exploring whether women experience Sport and Physical Activity (SPA) in a different way than men, and whether women's perception of the role that SPA plays in their personal life distances them from a sporting life.

The driving to participate in sport and physical activity

There are various factors that explain why people are motivated to make great efforts and sacrifice themselves to meet their goals and challenges. The driving is a psychology term understood as the urge or force that impels people to move in a determined direction, an aroused state of tension that arise from a need and motivates us to act in ways that will reduce the tension. A drive, as an instinctual need that has the power of moving behaviour of an individual, is a crucial factor to predict whether a goal will be successfully accomplished.

Deci and Ryan (2000), and Ryan and Deci (2000) reported that the need for empowerment and achievement is a powerful incentive to ensure that there is a continuity of effort, as is autonomy, which involves being able to regulate and control one's actions. The need for relationships is a powerful drive that pushes people to interact with, and feel connected to, others; whereas the need for enjoyment, which is very closely linked to socialisation, can be a strong stimulus to strive to complete a certain task. In sum, they argued that all of these need help people engaged in the tasks they set themselves.

Similarly, Woods, Tannehill and Walsh (2012) found that the most influential motive that affects participation in physical activity is enjoyment, while Subramaniam and Silverman (2007) concluded that a more appropriate learning environment would enhance students' enjoyment of lessons and would help improve their attitude. They also argued that students are more likely to enjoy their experiences and keep their intrinsic motivation if they engage in SPA outside of educational institutions. This requires a degree of self-regulation, determined by the conscious assessment of physical activity (Standage, Duda, & Ntoumanis, 2006), which could give rise to regular engagement in SPA in the future. The study conducted by Li, Chen, and Baker (2014) showed that positive attitudes were strongly associated with obtaining physical, personal and social gains from physical activity.

A better understanding, therefore, of the attitudes and motivations of both male

and female students with regard to SPA could influence the approach to, and focus of educational action and the design of Physical Education programmes. Based on these premises, our objective was to analyse and compare the perceptions and dispositions of a group of university students towards the SPA taking into account the students' gender perception and the universities to which they belong. The analytical tool chosen to this end were metaphors. A case study was carried out with two similar samples of students of the bachelor's degree in Sport and Physical Activity. In particular, one group was selected from the University of Spain, and the other from the University of Ecuador. The former has a student population of nearly 26,000 students and the latter has a student population that is close to 38,000 students. They are both public universities.

The universal language of metaphors

The choice of metaphors as a tool to investigate students' views was based on the consideration that throughout our lives, we learn from our experience and our social relationships, and this learning marks our life attitudes, motivations and goals (Ng, Nicholas, & Williams, 2010; Rosaen & Florio-Ruane, 2008). To a certain extent, our learning environment shapes us, and in the same way as our brain and mind shapes our learning. In this process, we tend to turn our experiences into metaphorical stories that give meaning and expression to our life, our thinking and our emotions. Metaphors help us to structure our conceptualisation and thought processes through interplay between experience, context and mind. Metaphors not only keep the footprint of our past history, but they also help us set objectives and drive us to action (Saban, 2010).

Since the seminal work of Lakoff and Johnson (1980), a number of prolific researchers have chosen metaphorical narratives as a tool of research, such as Huber, Caine, Huber, and Steeves (2013) and Mahlios, Massengill, and Barry (2010) among others. These authors established the way in which concepts are embodied in the sensory-motor system. Embodied cognition, a concept developed by Damasio (1994), Lakoff and Johnson (1999), and Slepian and Ambady (2014), allows our metaphorical relations to influence our conceptual system. Humans are social beings and our life experiences are social experiences (Carreira, 2001). The metaphors of our lives become mental models (Carreira, 2001) through a social and cognitive dialectic (Lakoff & Johnson, 1999). Processes of enculturation determine metaphorical stories, as they are reflections of a particular culture (Paavola Lipponen, & Hakkarainen, 2004). Identity is certainly trapped and reflected in this complex interplay of personal and social life, and constitutes a particular metaphorical construction (Thomas & Beauchamp, 2011). It is through these lenses that we observe and mentally process our environment (Saban, Kocbeker, & Saban, 2007).

In education research, an effective way of discussing students' and teachers' ways of thinking is through metaphors (Martínez, Hetterschijt, & Iglesias, 2015). Students have a personal and social history, often intuitive and unconscious, which leaves an indelible mark on their minds that is difficult to change unless it is consciously analysed. Several authors such as Blay and Ireson (2009) and Ng, Nicholas, and Williams (2010) have highlighted how the conceptions and beliefs of student teachers mark some of the behaviour and actions in their future professional practice (Biggs, 2011).

The persistence of beliefs and their impact on personal identity demands that they be recognised and verbalised. The construction of educational metaphorical stories is an intuitive act that intersects what they have experienced, socialised and conceptualised in their school life history. In this vein, Gillis and Johnson (2002) and Mahlios, Massengill, and Barry (2010) consistently emphasised that one way to examine the beliefs of students in initial teacher education is to identify the conceptual tools they use to make sense of their life, metaphor being the most powerful resource. As Rosaen and Florio-Ruane (2008) pointed out, metaphors are influential in teaching and learning because of the conglomerate beliefs, knowledge, feelings and actions that guide practice. Jensen (2006) considered them to be bridges that help to understand social and educational contexts. Therefore, metaphorical stories make it possible to glimpse the roots of these perceptions in students' minds, and the epistemological orientations that support and initiate a dialogue exchange (Patchen & Crawford, 2011). Metaphorical stories could then help to make conscious these otherwise diluted students' conceptions.

Questioning students' metaphors could be a means to facilitate the development of professional skills within initial teacher education discourse. In short,

investigating the metaphorical roots that sustain students' thinking seems to be as a useful source to explore the visions and perspectives that underlie physical education learning. To this end, we asked the students in our sample to design a metaphor about the meaning and value of SPA in their personal life.

METHODS

The study involved a sample of 100 Sport and Physical Activity students from the Faculty of Education of University Spain (n=58 men; n=42 women), and of 100 students from the Faculty of Physical Education and Culture from the University of Ecuador (n=52 men; n=48 women). Qualitative methodology was used to analyse and interpret their responses within the social context (Charmaz, 2011). The data comprised the metaphors described by students, as this narrative tool hosts the richness and variety of participants' stories (Huber, Huber, & Steeves, 2013).

The process of collecting and analysing information involved three phases. First, the research proposal and objectives were briefly presented to the students, and we ensured them that their anonymity would be maintained. The participant students were asked to design a metaphor that expressed the value and meaning they gave to SPA in their personal life. In order to design the metaphor, they had to reflect and write about the following phrase "Sport and Physical Activity for you is like..." Some participants designed more than one metaphor. Secondly, iterative readings of metaphors were carried out to establish a system of codes for analysing them with the help of the AQUAD qualitative data analysis package. AQUAD, developed by Huber and Gürtler (2013), was chosen for its ability to add emerging categories from participants' narratives as required. The data coding instrument was gradually adapted within the recursive process involving collecting participants' metaphors and answering the study's research questions. Thirdly, the categories that emerged after this process proved useful for coding the metaphors used by the students as outlined in the Results section, according to the triangulation process carried out by a group of three educational research experts.

An in-depth, extensive analysis of the metaphorical narratives resulted in six distinct codes relating SPA as a *Vital need*, as *Health and physical strength*, as *Mental and emotional health*, as *Personal satisfaction and self-growth*, as *Socialising and enjoyment* and as *Professionalization and competition*.

RESULTS

The students' perception of Sports and Physical Activity

The results discussed below include the six codes that emerged from the narratives analysed in this study and the absolute frequency (AF) and percentage of absolute frequency (%AF) with which they appeared in the stories (Table 1). The AF and its percentage refer to the number of occurrences of each code. Extracts from the participants' metaphorical narratives are also exemplified.

Code 1: SPA as a vital need

The findings of the study are discussed below, with comparisons made both universities (University of Spain (USP) and University of Ecuador (UEC)) and gender (Table 1). The analysis of the metaphors indicated that the students from the USP largely identified Sport and Physical Activity as a *vital need* (both women (46.3%) and men (36.7%)). Both female (30.5%) and male (26.7%) students from the UEC expressed less intense metaphorical views. Some narratives of metaphors associated with exercise as a vital need are reported below:

"Physical exercise is like food for the soul. It is like a forest is to the soil; it provides it with oxygen, beauty and vitality, and is a fundamental component for the proper functioning of the soil. It is essential and is increasingly scarce and difficult to maintain" (male student_USP_17).

"Sport is like water for plants, like a ray of sun" (female student_UEC_22).

"The body is useless without the brain and the heart, and it is the same for me, without exercise I am nothing" (male student_UEC_09).

"SPA is like a medicine that helps me to heal and not to get sick; it is something vital [for me]" (female student_USP_23).

Code 2: Health and physical strength

Closely linked to the conception of SPA as a vital need, there were a number of statements that connected it with health and physical strength. The students from the UEC (both male, 35.5%; and female, 26.8%) associated SPA more strongly with physical strength. Only a small number of students from the USP made this connection (5.3% of female students and 10% of male students):

"SPA is like a healthy heart; [this is] even more important for us, as it helps us to maintain a very good health condition. If this heart or activity stopped, our health and our life would deteriorate and we would become ill" (male student_UEC_12).

"SPA is like a tree: it keeps our environment healthy and makes our body physically strong" (female student_UEC_12).

"I see SPA as a tree one needs to water every day, to make sure that it will be lush and robust in the future" (male student_USP_23).

"Physical activity is like an oak; it fills me with strength" (female student_USP_11).

Code 3: Mental and emotional health

The participants linked SPA to emotional health, and described it as a means of releasing tension, stress and anxiety. This metaphorical perception was found mainly among the male students of the USP (24.2%), followed by the male students of the UEC (18.9%). The female students perceived SPA as a means of keeping emotional balance and control to a lesser extent. Only 9.5% of the female students from the USP and 18.3% female students from the UE made this connection. Some of the statements along these lines were:

"Sport is your life balance; it is the tool that strengthens your mind, forging the sportspeople of the present and the future" (male student_UEC_03).

"The best time of the week for me is when I engage in some kind of physical activity; it is the best way for me to get rid of tension, it frees my mind" (male student_USP_17).

"Sporting activity is like an impetuous river, because it seeks to solve many anxiety and stress problems, and ultimately helps to have a better quality of life" (female student_UEC_08).

"Physical activity is like a car engine. It is essential for the car to move. Well, for me it's the same. Physical exercise is essential for me to be in a good emotional state, for my emotions to work properly" (female student_USP_31).

Code 4: Personal satisfaction and self-growth

The metaphors that indicated that SPA brings personal satisfaction and self-growth were more often mentioned by USP students, and notably more by women (29.5%) than by men (20.8%). The female UEC students perceived this to

Table 1. Comparative of metaphors referred to SPA, by university and by gender.

SPA is like	USP Women		USP Men		UEC Women		UEC Men	
	AF	AF%	AF	AF%	AF	AF%	AF	AF%
Codes								
Vital need	44	46.30%	44	36.70%	25	30.50%	24	26.70%
Health/physical strength	5	5.30%	12	10%	22	26.80%	32	35.50%
Mental/emotional health	9	9.50%	29	24.20%	15	18.30%	17	18.90%
Satisfaction/growth	28	29.50%	25	20.80%	7	8.50%	9	10%
Socialisation/enjoyment	8	8.40%	7	5.80%	13	15.90%	6	6.70%
Professionalization/competition	1	1%	3	2.50%	0	0%	2	2.20%
Total	95		120		82		90	

AF: Absolute Frequency; AF%: Absolute Frequency percentage.
Source: Data collected by the authors.

a lesser extent (8.5%), followed by their male counterparts (10%). Some examples of these metaphors are provided below:

"SPA is a light that shines on the path to happiness" (female student_USP_40).

"SPA is like a rollercoaster in my life. We're always expecting and will have moments of satisfaction and euphoria, while we should also overcome our low emotional states. We need to be ready" (female student_USP_03).

"For me SPA is like salt in meals; many people don't use salt and have no problem with that. But my life lacks some of its meaning without it. Doing exercise brings me a lot of happiness and satisfaction" (male student_USP_25).

"Sport and physical activity is like a morning walk that brings you the wonderful things in life" (male student_UEC_47).

"[If I had to choose] between love and sport, I'll go for sport, as it gives me joy and happiness" (female student_UEC_29).

Code 5: Socialising and enjoyment

Metaphors that associate engagement in sport and physical activity with a social or a recreational purpose were less often found among the participants from both universities. The students from the UEC used them more often than any others, in particular female students (15.9%), whereas students from the USP resorted to them to a lesser extent, with only 8.4% of USP female students and 5.8% of USP male students using these metaphors.

"SPA is the most beautiful recreational activity that exists for a young soul; [it's] like a bed for an old soul" (female student_UEC_21).

"Sporting activity is friendship, togetherness and good times" (male student_UEC_10).

"It's like a sweet; everyone would like to have it at the right time" (male student_UEC_41).

"SPA in my life is being constantly laughing. If it were a character or a figure it would be a clown or a comedian, they always make us smile and have fun" (female student_USP_02).

"SPA in my life is like a good friend with whom I can live, spend time and share both good and bad moments in life, and I can have fun with him/her at least three times a week" (male student_USP_36).

Code 6: Professionalization and competition

A few metaphors were used that connected SPA *competition* and *professionalization*. This metaphorical view of physical activity was the least commonly found among all students (both male and female) from both universities. USP students only rarely used these metaphors (only 2.5% of men and 1% of women employed them), and none of the female students of the UEC resorted to them. One of the participants expressed it in the following terms:

"Sport is like a war but without dead people, where we find allies to compete against rival teams or people, and where the best will win" (male student_UEC_07).

DISCUSSION

The results show that the students in the sample highly and significantly valued SPA. Most of the participants regarded SPA as a *vital need* to be met, without which they would not be able to live. It is clear that the strongest drive/motivation is to feel that SPA is an essential part in their lives, and they feel highly driven to engage in this activity. The highest frequency of this code was found among USP female students and male students. The female students from the UEC perceived it as a *vital need* to a greater extent than the male students from the same university. In contrast, the male participants from the UEC identified *good health and physical strength* as their main motivations. Female UEC students also used metaphors in this vein, while they were rarely found among male and female students from the USP. *Emotional health* emerged in the second place among USP male students. In that sense, the perception of SPA as a source of physical and emotional health was decisive in the studies by Adams, Higgins, Adams, and Graves (2004). They investigated the attitudes that university students had towards physical activity, and their knowledge about the health-related attitudes and physical exercise habits in the American context. The results showed that students' attitudes towards their physical condition had a significant influence on

the perception of their level of knowledge about health.

On the other hand, USP female students identified *personal satisfaction* as their main motivation. However, this motivation was less significant among USP male students, and even less often found among UEC participants of both sexes. In this line, Al-Liheibi (2008), for his part, examined a sample of secondary school students and found that their attitudes towards physical activity were associated with their degree of personal satisfaction with the health benefits arising from it. Rikard and Banville (2006) also analysed students' attitudes towards physical activity and showed that, among other variables, the participants appreciated the health benefits of engaging in physical activity.

Research findings have also shown that future career prospects were not the main factor that led students to choose their degree, and that *competition* was not a priority for them, which suggests that they valued participation more highly than winning. In this regard, Moreno-Murcia, Sicilia, Cervelló, Huéscar, and Dumitru (2011) held that a teacher's intervention should be aimed at reducing the role of the ego and encouraging a motivational environment to carry out tasks in order to facilitate more adaptive behaviour. A competitive and professionalised vision of sport, then, was insignificant for all four cohorts.

However, it is a reason for concerns that sporting practice for *socialising and enjoyment* purposes were found to play a minor role. Despite the low value given by the participant students to socialisation in their engagement in SPA, this factor cannot be ignored, as self-regulation in practice is also the result of interpersonal interaction (Corno, 2011). Other studies that focused on adolescents (Palou, Ponseti, Gili, & Borrás, 2005; Ullrich-French & Smith, 2006) indicated that the socialising and recreational aspect of sport was of greater importance. This can lead to the conclusion that, even though the value of competition was not highlighted, nor was the role of a team vision and of collaborative efforts to meet goals. The participants did not seem to be aware of, or value, socialising as an outcome from sports practice. They may have had an excessively individualistic education, which could have influenced their perspectives. This is why it is necessary to apply more collaborative methodologies in the initial teacher Sport and Physical Activity programmes, and to emphasise the need to develop social skills.

As authors have stated Wallhead, Garn, and Vidoni (2013), sporting practice can be highly important in generating the required motivation for affiliation and enjoyment. For example, Van den Berghe, Vansteenkiste, Cardon, Kirk, and Haerens (2014) noted that many students engaged in SPA because they sought enjoyment and excitement in their practice. Therefore it seems to be a reason for concern that physical activity was perceived as a means of socialisation and enjoyment by such a low number of participants in our study. This may be due to the fact that students from Spain and Ecuador in this study, countries where the climate and customs encourage life outside the home, do not need SPA to socialise and may have other socialization habits.

In addition, physical activity has a media presence in both Spain and Ecuador, where it is presented as a requirement for a healthy life (UNESCO, 2014), and the influence of the media is noticeable in social and personal behaviour (Bernstein, 2008). Therefore, the results suggest that further research should be conducted into which sociocultural factors encourage or restrict students' motivations for their full engagement in physical activity in each of these countries.

CONCLUSIONS

The analysis of metaphorical narratives has served the purpose of revealing the students' views, conceptions and attitudes (Saban, 2010; Slepian & Ambady, 2014), as they have shown the meaning and motivations that drive them to incorporate sport and physical activity into their lives. As Graham (2008) noted, it is essential to help students unpack the role played by SPA in the present, in order to influence the motivation to engage in SPA in the future.

In our findings, considering the global differences between the perceptions towards the SPA, we observe that there were considerable variations in the absolute frequencies associated to the perceptions towards the SPA among the female students of USP and UEC, as well as among the male students of USP and UEC, mainly in the perceptions of the SPA as a *vital need*, of *health and physical strength* and of *satisfaction*, in both cases. In contrast, the overall results show that the total differences in frequencies found between female and male students at USP were less significant, except for the SPA perspective

as mental and emotional health. On the other hand, the lowest differentiation found between the groups was found in the comparison between female and male students at UEC, for example in the linkage of SPA as *mental and emotional health*. Therefore, within the limitations of this case study, it can be concluded that gender differences were less important than differences due to the social and educational context of the respective universities and countries. What could be the reasons for this? The influences of social and cultural factors could be one of these reasons. Humpel, Owen, and Leslie (2002) analysed the factors related to the opportunities for activity and accessibility of the various contexts, from the perspective of medicine. Johns (2006) studied context as a source of constraints and opportunities within the organisational realm, and other authors, starting from Bandura's research (1986), have emphasised the strong impact that sociocultural environments have on early and current experiences in shaping lifestyles and thinking. Learning-based perspectives such as those by Kirk and Kinchin (2003) are also valuable in this regard, as they consider the learning context and situation, including the visions of researchers concerned with the interrelations between gender, race, social class and sporting practice (Wright & Burrows, 2006).

Our findings are consistent with those by Koca, Asci, and Demirhan (2005), Rikard and Banville (2006), Subramaniam and Silverman (2007) and Prusak, Davis, Pennington, and Wilkinson (2014) in that a good perception of SPA, as a vital need, as a source of physical and emotional health or as personal satisfaction and growth, could be a form a good basis for positive attitudes towards physical education and encourages students' passion for it. They also corroborate the claim made by Day (2004) that passion is not a luxury, but rather a key element in any successful learning.

In general terms, the participants showed that they had very positive views of SPA in their personal life, and that they were strongly motivated. Li et al. (2014) argued that research into the attitudes and visions of physical education held by future teachers can provide a holistic understanding of this area of knowledge and serve as a basis for decision-making in primary (Graham, Holt-Hale, & Parker, 2007) and secondary schools (Rikard & Banville, 2006) and, specifically, for introducing curriculum changes (Zeng, Hipscher, & Leung, 2011). It is our desire to have contributed to this endeavour, within the limitations of the study.

The results about the uniform conceptions produced by social and cultural contexts mean that further research needs to be conducted along these lines, in order to gain greater insights into how contexts can either restrain or promote motivation to practise sport and engage in physical activity.

Additionally, given that there are a somewhat small number of studies that use metaphorical narratives in the field of Sport and Physical Education, except for the valuable precedent by Stylianou, Kulinna, Cothran, and Kwon (2013), we hope that we have made a contribution to the development of a new methodology for this area of research.

Finally, we thank all the students who voluntarily participated in the study and provided their metaphors. Their narratives have been a source of diagnosis and reflection that has enabled us to expand the knowledge about our students and their needs in order to improve Physical Education initial teacher training.

REFERENCIAS

- Adams, T., Higgins, P., Adams, H., & Graves, M. (2004). Effects of a required conceptually-based basic physical education course on university students' attitudes, exercise habits, and health-related fitness knowledge. *Research Quarterly for Exercise and Sport*, 75(1), A-55.
- Al-Liheibi, A. (2008). *Middle and high school students' attitudes toward physical education in Saudi Arabia*. Arkansas: University of Arkansas.
- Bandura, A. (1986). *Social foundations of thought and action: a Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bernstein, A. (2008). Emerging patterns in overweight and obesity in Ecuador. *Revista Panamericana de Salud Pública*, 24, 71-74.
- Biggs, J. (2011). *Teaching for quality learning at university: what the student does*. UK: McGraw-Hill Education.
- Blay, J., & Ireson, J. (2009). Pedagogical beliefs, activity choice and structure, and adult-child interaction in nursery classrooms. *Teaching and Teacher Education*, 25, 1105-1116.
- Carreira, S. (2001). Where there's a model, there's a metaphor: metaphorical thinking in students' understanding of a mathematical model. *Mathematical Thinking and Learning*, 3(4), 261-287.
- Charmaz, K. (2011). Grounded theory methods in social justice research. In N. K. Denzin, and Y. E. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 359-380). Thousand Oak: Sage.
- Corno, L. (2011). Studying self-regulation habits. In B. Zimmerman, and D. Schunk (Eds.), *Handbook of Self-regulation of Learning and Performance* (pp. 361-375). New York: Routledge.
- Damasio, A. (1994). *Descartes' error*. New York: Putnam.
- Day, C. (2004). *A passion for teaching*. London: Routledge.
- Deci, E., & Ryan, R. (2000). The "what" and "why" of goal pursuits: human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.
- European Commission (2014). *Gender equality in sport. Proposal for strategic actions 2014-2020*. Bruselas: European Commission.
- European Commission (2016). *Recommendations on gender equality in sport*. Bruselas: European Commission.
- Gillis, C., & Johnson, C. (2002). Metaphor as a renewal: re-imagining our professional selves. *English Journal* 91(6), 37-43.
- Graham, G. (2008). Children's and adults' perceptions of elementary school physical education. *The Elementary School Journal*, 108(3), 241-249. <https://doi.org/10.1086/529106>
- Graham, G., Holt-Hale, S., & Parker, M. (2007). *Children moving: a reflective approach to teaching physical education* (7th Ed.). New York: McGraw-Hill.
- Huber, G., & Gürtler, L. (2013). *AQUAD 7. Manual del programa para analizar datos cualitativos*. Tübingen: Günter Huber.
- Huber, J., Caine, V., Huber, M., & Steeves, P. (2013). Narrative inquiry as pedagogy in education: the extraordinary potential of living, telling, retelling, and reliving stories of experience. *Review of Research in Education*, 37, 212-242.
- Humpel, N., Owen, N., & Leslie, E. (2002). Environmental factors associated with adults' participation in physical activity: a review. *American Journal of Preventive Medicine*, 22(3), 188-199. [https://doi.org/10.1016/S0749-3797\(01\)00426-3](https://doi.org/10.1016/S0749-3797(01)00426-3).
- Jensen, D. (2006). Metaphors as bridge to understanding educational and social contexts. *International Journal of Qualitative Methods*, 5(1), 36-56.
- Johns, G. (2006). The essential impact of context on organizational behavior. *Academy of Management Review*, 31(2), 386-408.
- Kirk, D., & Kinchin, G. (2003). Situated learning as a theoretical framework for sport education. *European Physical Education Review*, 9(3), 221-235.
- Koca, C., Asci, F., & Demirhan, G. (2005). Attitudes toward physical education and class preferences of Turkish adolescents in terms of school gender composition. *Adolescence*, 40(158), 365-375.
- Lakoff, G., & Johnson, M. (1980). *Metaphors we live*. Chicago: University of Chicago Press.
- Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh*. New York: Basic Books.
- Li, F., Chen, J., & Baker, M. (2014). University students' attitudes toward physical education teaching. *Journal of Teaching in Physical Education*, 33(2), 186-212.
- Mahlis, M., Massengill, D., & Barry, A. (2010). Making sense of teaching through metaphors: a review across three studies. *Teachers and Teaching: Theory and Practice*, 16(1), 49-71.
- Martinez, M., Hetterschijt, C., & Iglesias, M. (2015). The European schools: perspectives of parents as participants in a learning community. *Journal of Research in International Education*, 14(1), 44-60.
- Moreno-Murcia, J., Sicilia, A., Cervelló, E., Huéscar, E., & Dumitru, D. C. (2011). The relationship between goal orientations, motivational climate and self-reported discipline in physical education. *Journal of Sports Science & Medicine*, 10(1), 119-129.
- Ng, W., Nicholas, H., & Williams, A. (2010). School experience influences on pre-service teachers' evolving beliefs about effective teaching. *Teaching and Teacher Education*, 26(2), 278-289.
- Paavola, S., Lipponen, L., & Hakkarainen, K. (2004). Models of innovative knowledge communities and three metaphors of learning. *Review of Educational Research*, 74(4), 557-576.
- Palou, P., Ponseti, X., Gili, M., & Borrás, P. (2005). Motivos para el inicio, mantenimiento y abandono de la práctica deportiva de los preadolescentes de la Isla de Mallorca. *Apunts, Educación Física y Deportes*, 81(3), 5-11.
- Patchen, T., & Crawford, T. (2011). From gardeners to tour guides: the epistemological struggle revealed in teacher-generated metaphors of teaching. *Journal of Teacher Education*, 62(3), 286-289.
- Prusak, K., Davis, T., Pennington, T., & Wilkinson, C. (2014). Las percepciones de los niños sobre un programa de educación física en todo el distrito. *Revista de Enseñanza en Educación Física*, 33(1), 4-27.

- Rikard, G., & Banville, D. (2006). High school student attitudes about physical education. *Sport, Education and Society, 11*(4), 385-400.
- Rosaen, C., & Florio-Ruane, S. (2008). The metaphors by which we teach. Experience, metaphor, and culture in teacher education. In M. Cochran-Smith, S. Feiman-Nemser, D. McIntyre, and K. Demers (Eds.), *Handbook of Research on Teacher Education. Enduring Questions in Changing Contexts* (pp.706-731). New York: Routledge.
- Ryan, R., & Deci, E. (2000). Intrinsic and extrinsic motivations: classic definitions and new directions. *Contemporary Educational Psychology, 25*(1), 54-67.
- Saban, A. (2010). Prospective teachers' metaphorical conceptualizations of learner. *Teaching and Teacher Education, 26*(2), 290-305.
- Saban, A., Kocbeker, B., & Saban, A. (2007). Prospective teachers' conceptions of teaching and learning revealed through metaphors analysis. *Learning and Instruction, 17*, 123-139.
- Slepian, M., & Ambady, N. (2014). Simulating sensorimotor metaphors: novel metaphors influence sensory judgments. *Cognition, 130*, 309-314.
- Standage, M., Duda, J., & Ntoumanis, N. (2006). Students' motivational processes and their relationship to teacher ratings in school physical education: a self-determination theory approach. *Research Quarterly for Exercise and Sport, 77*(1), 100-110.
- Stylianou, M., Kulinna, P., Cothran, D., & Kwon, J. (2013). Physical education teachers' metaphors of teaching and learning. *Journal of Teaching in Physical Education, 32*, 22-45.
- Subramaniam, P., & Silverman, S. (2007). Middle school students' attitude toward physical education. *Teaching and Teacher Education, 23*(5), 602-611.
- Thomas, L., & Beauchamp, C. (2011). Understanding new teachers' professional identities through metaphor. *Teaching and Teacher Education, 27*(4), 762-769.
- Ullrich-French, S., & Smith, A. (2006). Perceptions of relationships with parents and peers in youth sport: independent and combined prediction of motivational outcomes. *Psychology of Sport and Exercise, 7*(2), 193-214. <https://doi.org/10.1016/j.psychsport.2005.08.006>
- UNESCO (2012). *Empowering girls and women through physical education and sport*. Bangkok: UNESCO Bangkok.
- UNESCO (2014). *World-wide survey of school physical education*. UK: UNESCO-North Western Counties Physical Education Association.
- United Nations (2007). *Women 2000 and beyond: Women, gender equality and sport*.
- United Nations Assembly (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. New York: United Nations.
- Van den Berghe, L., Vansteenkiste, M., Cardon, G., Kirk, D., & Haerens, L. (2014). Research on self-determination in physical education: key findings and proposals for future research. *Physical Education and Sport Pedagogy, 19*(1), 97-121.
- Wallhead T., Garn, A., & Vidoni, C. (2013). Sport Education and social goals in physical education: relationships with enjoyment, relatedness, and leisure-time physical activity. *Physical Education and Sport Pedagogy, 18*(4), 427-441.
- Woods, C., Tannehill, D., & Walsh, J. (2012). If physical education is fun, will I participate? An examination of the relationship between enjoyment of physical education and physical activity and the physical activity levels and physical health status of adolescents. *Irish Educational Studies, 31*(3), 263-280. <https://doi.org/10.1080/03323315.2012.710068>
- Wright, J., & Burrows, L. (2006). Re-conceiving ability in physical education: a social analysis. *Sport, Education and Society, 11*(3), 275-291.
- Zeng, H., Hipscher, M., & Leung, R. (2011). Attitudes of high school students toward physical education and their sport activity preferences. *Journal of the Social Sciences, 7*(4), 529-537.