

The Effects of Teaching Human and Social Sciences in A Training Program Intended for Physical Education Students in Tunisia

Bechir Nasri

Higher Institute of Sport and Physical Education of Kef,
University of Jendouba, Tunisia

Ines Souid

University of Lyon/University Lyon 1, L-VIS, EA-7428,
SFR CRIS, FED-4272, France

ABSTRACT

This research addresses the question of the social representation of human sciences teaching in a training program intended for physical education student trainees. The objectives of the study are to identify the social representations of human sciences teaching for student trainees and to see the influence of social representation on practice¹ and educational behaviors. Data was collected through in-depth interviews using an associative method with a representative sample of students. The results show that the participants' social representation of the human sciences is organized around common elements: the understanding of human beliefs, life and culture.

Keywords: Social representation, educational practice, social practice, human sciences, school culture.

INTRODUCTION

Applied human sciences training to physical and sporting activities in Tunisian institutes of sport and physical education aims to enable students to access fundamental knowledge in the human sciences and to develop their ability to exploit this knowledge at the level of teaching physical and sporting activity. Also achieve the most complete knowledge of the young person, for whom he will be responsible, in his multiple dimensions, socio-affective, cognitive, psychomotor, in order to best optimize the educational act and sporting performance². In addition, it enriches essential knowledge related to teaching, pedagogy, didactics of physical and sports activity and sports training and develops its abilities from this knowledge.³ At this level, the Tunisian higher education system offers future physical education teachers dual training, between scientific disciplines and physical practice. The latter are called "contributory sciences" or supporting sciences by the official Tunisian programs because they are intended for future teachers to better understand, then to better learn physical and sporting activities on

¹Doise, W. (1986). Social representations: definition of a concept in the study of social representations, (under the direction of W. Doise and A. Palmonari), Paris, Delachaux and Niestlé, 81-94.

²Zouabi, M. (2003). Evolution of the concept of physical and sport education in Tunisia. From INSEP (special issue), The Joinville Footprint, (P. Simonet, and L Véray, eds.), Paris, 445-463.

³Errais, B. (1970). Training of EPS executives in Tunisia. Bulletin EP of the INS of Tunis, n°17, pp 3-8.

the field and subsequently to better teach them to their future students⁴.

Furthermore, teachers seek to transmit to their students' intellectual tools to understand human societies and their functioning⁵. The human sciences are the set of disciplines whose object of study is the human being, in the different aspects of his reality on an individual and collective level. Among the factors that militate in favor of the participation of the human and social sciences in teacher training⁶.

In this study, one of our intentions consists of investing the theoretical and methodological contributions of the studies of social representations initiated by psychologists and psychosociologists, in particular the conceptualizations of the role of social representations as a guide for social practices and behaviors, in the context of a universe in social change. Our approach favors the analysis of social representations of the human sciences found among Tunisian student interns.

Our problem, which is part of the more general framework of the study of the scientific transformation of student interns aimed at meeting practical needs with their students, highlights the lack of interest given to the role of social representations in this process, a role that emerges from the function of social representations of being the interface of socio-educational reality. Social representations take a privileged place in individual conduct, as a system of orientation and regulation of conduct. As part of this research, our choice of social representations is an epistemological and methodological choice aimed at interpreting the data from our research relating to the educational behaviors of our participants.

In our research, trying to answer the following questions: What are the social representations of human and social sciences among physical education trainee students in Tunisia? What type of influence does social representation have on the practices and behaviors of students in a teaching context?

The formulation of hypotheses can be established a priori when they arise from the personal reflection of the researcher based on another previous scientific research. Our first hypothesis, which is linked to the first question of our problem, assumes that the social representations of the human and social sciences among trainee students are socially constructed and organized by a central core and peripheral elements.⁷. Let us remember that the evolution of a social representation following a profound change in society is never linear. Several phenomena intervene in this process: the perception of the past, collective memory, present experiences, cultural changes.

⁴Rekik, G. and Bali, N. (2017) Tunisian Physical Education Student Trainees' Agreement Rate about the Consistency between Initial Training and Integration during the Preparatory Internship for Professional Life. *Creative Education*, 8, 373-382. doi: 10.4236/ce.2017.83029.2

⁵Kpazai, G. and Attikleme, K. (2012). The role of professional experience on the dimension of reflexivity in teaching: a case study of two secondary school physical education and health teachers. *Journal of Human Sport and Exercise*, 7, 254-262.

⁶Lapostolle, G. (2005). The orientation of students in college since the 1980s: a problem of political choice between two forms of democratization, no. 34, 415-438.

⁷Nasri, B., and Rouissi, M. (2022). Social representation inspector inspected in the Tunisian school system. *Journal of anthropological and archaeological sciences*. 7, 915-916.

Our second hypothesis assumes that there is a close relationship between the social representations and the social practices of students, such that social representations guide the practices of student trainees. The functioning of social representation, understood as social construction, is distorted at the same time by the action of a cultural and socio-cognitive matrix itself anchored in the memory of the social group studied. Our article aims to understand the vision that physical education student trainees have of the teaching of human and social sciences in a university training program in Tunisia.

THE ANALYTICAL FRAMEWORK

In the human and social sciences, scientific research necessarily refers to a paradigm or theory in which it is based⁸. We position our research according to the analysis of social representations in a context of the theory of Jean-Claude Abric and Claude Flament. The social memory of the past, as well as the perception of the current social context of modernization will allow us to reveal the process of the social representation of human sciences teaching among trainee students.⁹ The educational relationship which is carried out mainly on the set of social relationships which are established between the educator and those he educates, to move towards educational objectives¹⁰, in a given institutional structure. According to Moulinier et al, the theory of representations is a theory of the social bond, which sheds light on what, permanently, connects us to the outside world¹¹.

We favor the analysis of social representations in a context that is both diachronic and synchronic. The social memory of the past, as well as the perception of the current social context of mutations and social changes, will reveal to us the process of anchoring social representation. Our axiom is based on the idea that social representations do not remain fixed entities although they take the form of a hierarchical atomic structure, located in space and time. Their dynamic nature is underlined by the importance of the nature of its components for social practices. The very different character of the role of opinions, values, norms, beliefs, is thus complemented by their central or peripheral place in the representation.

THE METHOD

The choice of qualitative or quantitative, in a study, is determined by the objectives of the research, by the dimensions of the problem which most interest the researcher and possibly by practical constraints. It is based on these criteria that we opt for the qualitative method.

We also opt for the qualitative approach because it allows us to understand the deep meaning that students give to their place in the education system. It also offers us the opportunity to discover their daily experience, their interaction and their identity and where social dynamics are in full swing.

⁸Boudon, Raymond, *Methods in sociology*, Paris, PUF, (coll. Que sais-je?), 1983.

⁹Nasri, B., and Rouissi, M. (2022). Social representation inspector inspected in the Tunisian school system. *Journal of anthropological and archaeological sciences*. 7, 918-919.

¹⁰Boudon, R. (1986). *Individualism and holism in the social sciences*, in, *on individualism: theories and methods*, (under the direction of P. Birnbaum, J. Leca), Paris, Presses de la FNSP, 45-59.

¹¹Nasri, B., and Rouissi, M. (2022). Social representation inspector inspected in the Tunisian school system. *Journal of anthropological and archaeological sciences*. 7, 917-918.

As part of our study and in order to find answers to the hypotheses formulated previously, we placed our research according to a qualitative approach. To find out, we went through individual opinions¹² and we looked for the principles, values and representations that guide behavior. Human facts are, in fact, intentional by mental representations of social origins outside of which they cannot be understood.

Our research is therefore mainly qualitative. To this end, we first began by completing the review of writings likely to shed light on the question studied. A large number of works, published mainly in the form of articles in scientific journals or magazines, have been written on the question of social representation, but that of the representation of the human sciences among student trainees in physical education has been little studied. Our intention with this approach was not to make a complete inventory of all these works, even less to compare our work to theirs, but to draw inspiration from these works to focus instead on the exclusive analysis of the situation of the system of Tunisian higher education. Then, our methodological choice was made according to our theoretical orientations. We could also discuss their advantages and their limits, but not all of them provide the same dimensions of reality. The researcher is encouraged to favor those which most correspond to his research object.

The study of social representations requires the use of methods aimed, on the one hand, at identifying and bringing out the constituent elements of the representation and, on the other hand, at knowing the organization of these elements and distinguishing the central system. of the peripheral system. To achieve these objectives, we need a multi-methodological approach. Organized in two successive stages, first allowing the identification of the content of the representation and then the study of the relationships between the elements identified, their relative importance, their hierarchy and the structure of the social representation.

Thus, in order to obtain detailed information on the representations of human sciences teaching for student trainees and the influence of this representation on the teaching practice of our participants with their students in a teaching context, two techniques of data collection were employed. For the first time, we carried out a survey using the technique of semi-structured interviews targeting the relevant experiences lived by our respondent.

Fourteen semi-directed interviews were carried out with young Tunisians. The interview guide is structured into five parts according to the dimensions to be investigated. The major themes concern training and social skills, aspects of emotional ties with students, professional skills, experiences and socio-cultural origins. In addition to the themes covered, the interview included a certain number of questions on variables commonly used in a survey. Precise information on the subjects' age, education, lived experiences and general information on the style of higher education, type of school audience, effectiveness and socio-cultural status. The interviews took place at the Higher Institute of Sport and Physical Education of Kef, taking notes according to the agreement of the interviewee. It allows us to collect information that allows us to perceive the organization of the social representation of human and social sciences among physical education students in Tunisia.

Secondly, since the use of the interview despite its relevance raises some questions such as the

¹²Boudon, R. (1979). *The logic of the social, introduction to sociological analysis*, Paris, Hachette Littérature, 89.

spontaneity of the expression and the influence of the situation of enunciation, we added an associative method to the semi-structured interviews. It is free association, which allows the actualization of implicit or latent elements, which would be buried or masked in discursive productions. It consists, starting from an inducing word, of asking the subject to produce all the words, expressions or adjectives that then come to mind. Although it is also based on verbal production, it makes it possible to reduce the difficulty or the limits of the discursive expression of the interview. The free association method was supplemented and also supported by another method that of hierarchizing items.

Subsequently, we used the technique of evocation hierarchical, which is inspired by the work of Pierre Verges in a table composed of four boxes, which proposes using the free association method then a hierarchy which is essentially based on the frequency and rank of appearance. Following criticism, the rank of appearance is abandoned and replaced by the rank of importance, because in most cases essential things often only appear after a more or less long phase of building confidence or reduction. Defense mechanisms¹³. The average frequency is calculated this way: Number of times stated / number of items.

$$\text{Fréquence moyenne} = \frac{\text{Nombre de fois énoncés}}{\text{Nombre des items}}$$

The average rank is calculated as follows:

$$\text{Rang Moyen} = \frac{\sum \text{des rangs}}{\text{Combien de fois énoncés}}$$

Subsequently, we classified the average frequencies and the average ranks obtained in an ascending order and we will bring out the average of each. We analyzed the hierarchical evocations, which are classified according to Verges in a table composed of four boxes.

Table 1: Distribution of hierarchical evocations according to frequency and importance¹⁴

		Rank	
		Big	Weak
Frequency	Strong	BOX 1 Core area	BOX 2 1st periphery
	Weak	BOX 3 Contrasting elements	BOX 4 2nd periphery

Crossing the frequency and the rank of importance provides an indication of the centrality of the elements or their peripheral character. Three zones are defined from a table with four boxes. At the top left, we find the central elements which are very frequent and very important, at the top right and at the bottom left elements which have either a high frequency or great

¹³Nasri, B., and Rouissi, M. (2022). Social representation inspector inspected in the Tunisian school system. *Journal of anthropological and archaeological sciences*. 7, 918-919.

¹⁴Abric, JC (2003). The structural approach to social representations, in Moscovici S. and Buschini F., *Methods of the human sciences*. Paris, PUF. 375-392.

importance and which are peripherals. These two boxes express according to Verges¹⁵, an ambiguity and “we will interpret this as a potentially unbalancing zone, a source of change”, a change which refers to the periphery according to the theory of the central core because the central elements are stable and resist change. The fourth box at the bottom right is made up of infrequent and less important elements which are therefore secondary and would constitute the second periphery¹⁶. This classification makes it possible to “confirm or reinforce the hypothesis that we are in the presence of organizing elements of representation”¹⁷. Verges, emphasizes that it is the most salient and significant terms (the most frequent and important) which are central¹⁸.

Abrie specifies the limits of free association because the production obtained by free association is difficult to interpret a priori, the associations produced can be ambiguous or polysemous. He nevertheless underlines the interest of this technique which quickly allows us to have “very serious avenues of analysis of the representation and its central core¹⁹» in order to carry out additional investigations using other methods of data collection and analysis.

RESULTS

Table 2: Summary table of respondents

Coded	Sex	Sports specialty	Setting up internships
E1	Male	Boxing	Basic school
E2	Male	Boxing	Basic school
E3	Male	Tennis	High school
E4	Male	Tennis	High school
E5	Male	Soccer	High school
E6	Male	Soccer	High school
E7	Male	Soccer	Basic school
E8	Male	Soccer	High school
E9	Feminine	Basketball	High school
E10	Feminine	Basketball	High school
E11	Feminine	Volleyball	High school
E12	Feminine	Volleyball	High school
E13	Feminine	Gymnastic	Basic school
E14	Feminine	Judo	Basic school

This method allows us to identify the constituent elements of a social representation. By following the different steps to bring out the central core, we gathered the terms relating to the same theme, so that we obtained the following items. Source of information, culture,

¹⁵Verges, P. (1994). Central core approach: quantitative and structural properties in Guimelli C., (Ed.), Structures and transformations of social representations. Paris, Delachaux and Nestlé, 105.

¹⁶Abrie, JC (2003). The structural approach to social representations, in Moscovici S. and Buschini F., Methods of the human sciences. Paris, PUF. 378.

¹⁷Abrie, JC (1994). Methodology for collecting social representations, in Abrie JC, (Ed.), Social practices and representations, Paris, PUF. 4th ed, 67.

¹⁸Verges, P. (2001). Analysis of social representations using questionnaires. French journal of psychology, 43-2, 537-561.

¹⁹Abrie, JC (2003). The search for the central core and the silent zone of social representations, in Methods of studying social representations, Abrie JC, (Ed), Ramonville, Editions Erès, 59-79.

knowledge, consciousness, understanding of life, understanding of society, understanding of the human psychological system, understanding of the human sociological system, understanding of the human psycho-sociological system, understanding of human convictions, orientation of educational practice, understanding of the philosophy of social life and intellectual tool.

To calculate the median, you must order the data. The median is the number that lies at the midpoint. Median= the midpoint value of ordered data. Remember that the “n” designates the number of items. In this way we apply the following equation.²⁰

$$Médiane = \frac{(n + 1)}{2}$$

Subsequently, we use the following formula to be able to calculate the values constituting the ordered data.

$$Médiane = \frac{(13 + 1)}{2} = 7$$

Table 3: Tables of ranks and ordered frequencies

The items	Ordered frequencies	The items	The ordered ranks
Understanding of society	0.076	Understanding of society	1
Understanding the philosophy of social life	0.076	The source of information	1,769
Orientation of teaching practice	0.153	Culture	2.142
Understanding the human psych sociological system	0.153	Understanding the human phytosociological system	2.50
Understanding the human psychological system	0.153	Orientation of teaching practice	2.50
Understanding the human sociological system	0.230	Understanding of life	2,666
Understanding human beliefs	0.230	Understanding human beliefs	3.333
Understanding of life	0.230	Understanding the human psychological system	3.50
Intellectual tool	0.461	Social skills	3,714
Awareness	0.538	Intellectual tool	3,833
The source of information	1	Understanding the philosophy of social life	4
Social skills	1	Awareness	4,230
Culture	1,076	Understanding the human sociological system	4.333

The median of the average frequencies is: 0.230, while 3.333 is the median of the average ranks.

²⁰Abric, JC. (1994). *Methodology for collecting social representations, in, social practices and representations*, (under the direction of JC. Abric). Paris. PUF 74.

With the results obtained, we classified the different items in the four boxes: box of the central core, first peripheral, second peripheral, the contrasting elements.

Table 4: The classification of the components of the representation

	Rank		
frequency	Strong	BOX 1 Core area	BOX 2 1st periphery
		• Understanding human beliefs. • Understanding of life. • The source of information. • Culture	• Awareness. • Intellectual tool. • Social skills
	Weak	BOX 3 Contrasting elements	BOX 4 2nd periphery
		• Understanding of society. • Understanding of the human psych sociological system. • Orientation of educational practice.	• Understanding the human psychological system. • Understanding of the philosophy of social life. • Understanding the human psychological system.

Analysis of the table above allows us to distinguish the constituent elements of the representation. For our sample, the representation of human sciences teaching among physical education students is organized around a central core which is made up of 4 elements: "Understanding human beliefs", "Understanding of life", "Information source", "Culture". There are 3 peripheral elements: "Consciousness", "Intellectual tool" and "Social ability". These are the most important peripheral elements. The elements of the second peripheral are made up of 3: "Understanding of the human psychological system", "Understanding of the philosophy of social life" and "Understanding the human psychological system". Finally, for the contrasting elements are as follows: "Understanding of society", "Understanding of the human psycho-sociological system" and "orientation of pedagogical practice".

Acceptance of the consensual principle as essential for the definition of central elements allows us to attribute structuring functions, on the scale of social representation, to more frequent elements. The latter can be considered more central than the others. Their centrality will be reinforced by the strong appearance. On the other hand, less frequent elements characterized by a weak or strong appearance are rather placed at the peripheral level of social representation.

Remember that the more frequent the elements are (greater than or equal to 0.230) and well placed (low average rank: less than 3.333), the higher the centrality of the elements. According to this approach the central elements are located in the box where there is a positive congruence between the two criteria (very frequent and well placed). We also notice that two items have a high frequency but they are not well placed: "Consciousness, Intellectual tool and social ability. We assume that these are elements fairly shared by most young people but with less structural significance. Concerning the elements "understanding of society, understanding of the human psycho-sociological system and orientation of educational practice". Seem to have great relevance for a few young people among the respondents but this relevance is not shared

by the vast majority. One participant state that: "Social psychology, a scientific field of study that analyzes how our social behavior (thoughts, feelings and behaviors) is influenced" (E10).

Acceptance of the consensual principle as essential for the definition of central elements allows us to attribute structuring functions, on the scale of social representation, to more frequent elements. The latter can be considered more central than the others.

Their centrality will be reinforced by the strong appearance. On the other hand, less frequent elements characterized by a weak or strong appearance are rather placed at the peripheral level of social representation. The human and social sciences are generally represented as "understanding human beliefs", such as intellectual mechanisms, convictions and ideas. It essentially aims at achieving "understanding of life" through the ambitious and the conscious and the projects of life. The "source of information" nevertheless remains an important and necessary condition for learning and knowing several things, and ultimately "culture". Ultimately, the teaching of human and social sciences is then a binding part in the university curriculum for the training of a physical education teacher in Tunisia, because it is essential and fundamental for a man in the field. An interviewee confirms that "thanks to the teaching of social psychology I clearly understood the role that psychological and social mechanisms can play in guiding our behavior" (E2). Certain peripheral elements reinforce the importance of central elements belonging to the same categories. We thus see that the elements "understanding of the human phytosociological system", "Understanding of the philosophy of social life" and "understanding of the human psychological system" reinforce the idea of means represented in the center by the element "understanding of human beliefs".

The elements "understanding of society", "Understanding of the human psycho-sociological system" and "orientation of educational practice" have, in fact, a lower probability of being central but seem to play an important role in the organization of the representation. Note that the category "understanding of society", referring to the fundamental learning of university training. Another participant adds "teaching human sciences at university explains to us the relationship that exists between man and society, in fact psychology: it is the scientific study of mental and emotional processes: thoughts, feelings, emotions...of the individual. While sociology is considered to be the scientific study of societies, social groups" (E4). On the other hand, we can cite previous research in this area, for the study of the representation of the bank²¹, the centrality hypothesis is made for elements having recognition frequencies of 79% and 71%²², or characterization profiles of 60%/23%/17%; For others, the standard of 75% prevails. This is adopted by Tafani and Bellon in a study on the representation of studies among high school students.²³

DISCUSSION

First of all, the theory of representations is a theory of the social bond, which sheds light on

²¹Abric, JC (1998). The study of social representations of banking in France: a methodological approach, in V. Rigas, (Ed), *Social Representations and Comtempory Social Problems*, Athenes, Ellinika grammata. 3-10

²²Abric, JC (2003). The search for the central core and the silent zone of social representations, in *Methods of studying social representations*, Abric JC, (Ed), Ramonville, Editions Erès. 74

²³Moliner, P. (2001). Formation and stabilization of social representations, in Moliner P. (Ed.), *The dynamics of social representations*. Grenoble, Presses Universitaires de Grenoble. 169

what permanently connects us to the outside world²⁴. Social representation allows us to know and explain the nature of intra- and inter-group social links²⁵. Otherwise, the human sciences are represented, according to the elements of the central core, as being a view on society that is carried by convictions. As if the meaning that events, facts, have was an element of understanding reality.

The multiplication of references can be a way of hiding a position, as if the one which then appears between the lines was objectively founded. The content of social sciences tests has a point of view on reality. It is not an external description, but a description that makes sense because there is a point of view that presents a reading. We can position ourselves in relation to a debate, but the fundamental reference is not to the debate. In the end, what matters is one's own judgment. In addition, these disciplines are represented in the minds of students, in the form of knowledge tools that contribute to disseminating a particular culture linked to man and his society. At this stage, we will discover the different representations of the human sciences among physical education student trainees, then we will study the effect of their representation on the behavior and conduct of physical education student trainees in a teaching setting.

In the discussion, we begin by questioning the identification of the content of the representation and the control of the centrality of the elements. We then discuss the results overall and those of our group of students. We end by discussing the search for hidden elements. The different individual backgrounds that are geographically and culturally distant seem to have a minor impact on the common beliefs and values shared by the participants. Knowing that the central core of a representation is determined by the history and collective memory of the group.

In other words, these are the essential values linked to the acquisition of fundamental knowledge. The analysis of the results made it possible to know on the one hand the contents of the representation of the actors and the organization, the structure of the representation. However, what is less trivial is what we can understand with the psychosocial perspective on this group of major players in the education system. It is now a matter of highlighting the differences and similarities in the universes of beliefs ²⁶, and in the universes of opinions²⁷ groups present and to test the validation of our hypotheses.

The central core of the social representation of the human sciences is composed of the elements: "understanding of human beliefs", "Understanding of life", "source of information" and "culture". A singular place is reserved for the understanding of society and the understanding of the human psych sociological system, because "understanding of society and understanding of the human psych sociological system" is identified as being very close to the core by the hierarchical evocation. In addition, this element has the status of a non-negotiable element, of absolute prescription, which would reinforce its presence in the core.

The results of the hierarchical evocation show that the social representation of the human

²⁴Moliner, P. (2002). Râteau Patrick and Cohen-Scali Valérie, Social representations, practices and field studies, Presses Universitaires de Rennes, 66.

²⁵Abric, JC (1994). Social practices and representations, PUF, 1994.

²⁶Kaës, R. (1968). Images of culture among French workers. Paris. Cujas.

²⁷Moscovici, S. (1961). Psychoanalysis, its image, its audience. Paris, PUF, 55.

sciences, whatever the sociocultural status of the participants, functions around learning. "Understanding of human beliefs", "understanding of life the source of information" and "culture", are the common central elements which structure the representation and give it its meaning. The sociocultural origin of the participants and the social practices inherent to this status seem to have an impact on the perception of this academic discipline represented.

On the other hand, the elements of the second peripheral and the contrasting elements of social representation are centered at the bottom of the understanding of society, the understanding of the human psycho-sociological system and the orientation of pedagogical practice in the classroom. According to the responses of our interviewees, learning the human sciences aims to understand the scientific mechanisms of the social behavior of the individual in the broad sense, whether at the level of external behaviors (actions, words, gestures) or Cognitive (thoughts, processes). Intellectuals and also affects (emotions, feelings).

These results would validate the first hypothesis, which postulates that the central core of the social representation of the human sciences revolves around the understanding of human beliefs, the understanding of life, the source of information and culture. On the periphery is composed of "consciousness, an intellectual tool and social skills". Thus, we see that the same central values, the same frame of reference are shared by everyone. Our participants have the same social representation of the human sciences studied at university and "sharing a social representation with other individuals therefore means sharing with them central values associated with the object concerned. It is not the fact of sharing the same content which defines the homogeneity of a group in relation to an object of representation: it is the fact of referring to the same central values of the core²⁸".

To deepen the analysis of the information collected, we focused on a dual approach to the evocations: the first can be described as a prototypical analysis, the second is a categorization. Our first analysis only considers the terms according to Verges, supported by other researchers; it is a lexicographic analysis (the frequencies of appearance of the terms and the order numbers of appearance of the terms). It is important to cross-reference two possible criteria of prototypicality: that of frequency of appearance and that of rank of appearance. Frequency is the most classic criterion but we can also wonder if stating a term first rather than last, after racking our brains to find it is not also a relevant criterion.

Considering the results of our categorical analysis, by crossing the rank of importance, the frequencies of occurrences and generic words, we consider that the elements "understanding of human beliefs", "understanding of life", "source of information" and "culture", have the highest probabilities of belonging to the central core. We apply this conditional centrality scheme in the analysis of evocations.

It is therefore the object of reflection of our object of representation, which thus strives to understand, based on their practice, the process of knowledge production that they implement. They aim, in doing so, both to better evaluate themselves the limits of the knowledge they provide, and to better arm the student by revealing to them the intellectual tools that they use

²⁸Abric, JC (2001). The structural approach to social representations: recent developments. *Psychology and Society*, 4-2, 83.

implicitly in their quest to understand the existing. On the other hand, it aims to examine the practical means attempted to respond to them, with transdisciplinarity as the horizon. They thus constitute an entire intellectual apparatus which opens the mind to the decompartmentalization of disciplines, and which provides the concepts and the overall framework necessary to think about it and carry it out in a rigorous manner.

To study the behavior of physical education trainee students, it is necessary to emphasize the scientific identity of their university training. To do this, students must be trained and made aware of an interactive pedagogy²⁹ and more dynamic to practice scientific knowledge in direct relation to social reality. If we look at the training curriculum at Tunisian higher institutes of sport and physical education.

We thus see that the initial training of physical education teachers at the Tunisian higher institutes of sport and physical education, certainly strongly focused on physical and sporting activities, does not go without a strategic concern to establish a progression aimed at establishing a scientific knowledge base as well as those relating to physical and sporting activities at the start of the course to subsequently give an increased place to courses specifically relating to the teaching of physical education³⁰.

University training at Tunisian higher institutes of sport and physical education therefore does not provide sufficient room for students to appropriate their acquired knowledge in real practice situations. This is why the most of respondents believe that the university teaching model is seen as driving the learning process. In the imagination of some students, the teacher and their way of teaching shapes the apprentice's thinking and her reflective character.

The means of motivation in the classroom are not the same from one person to another³¹, for example: some students are motivated by the type of intervention, others by a good working atmosphere. The social representations of human sciences and their teaching universe will have an impact on the behavior of physical education students with their pupils in a teaching setting. The idea of behavioral change is expressed on several occasions by the interviewees who emphasize this fact. They show us that they have an impression that these sciences despite their cognitive and scientific importance, However, we cannot transform these concepts and integrate them into educational practice with students.

Most of the student trainees interviewed consider that there is a close relationship between mood and behavioral regulation. Another respondent considers that the open and smiling facial expressions of university teachers who teach human and social sciences (psychology and sociology) have a direct impact on the interaction and further reinforce the influence of teaching content in the classroom. The minds and beliefs of the students. Whereas closed and passive communication produces disturbances in behavior. So, our second hypothesis is

²⁹Terrisse, A. (1999). The question of the link to knowledge with the educational learning process: the clinical point of view. *Carrefour Education*, 62-87.

³⁰Soud, I. (2023). Physical Education Teachers in Tunisia Conception of Training Actors as a source of Vulnerability. *Journal of Education, Society and Behavioral Science*, Volume 36, issue 1, page 61-71.

³¹Erbani, E. (1983). Influence of competitive sporting experience on the teaching practice of PE students. *Human Motor Review*, 3-11.

verified, social behaviors such as speech, professional gestures and the speech produced by our participants in the class, are influenced by the behavior of university teachers. Social representations thus determine social practices. Indeed, the way in which trainee students represent the content of the humanities will determine and influence their behavior.

However, we can conclude that the strengths of our article represent in the validated methods and methodological tools, and like any research with a qualitative tendency, our work suffers from limitations, firstly it aims to take a longitudinal aspect, in addition, it solicits a small number of participants.

CONCLUSION

The research work that we carried out on the social representations of human sciences teaching among trainee students allowed us to understand the vision that physical education students have of training in this field. This allowed us to better understand the relationship between these actors in the Tunisian university system.

These findings also make it possible to note the existence of a gap between theory and practice in the university training of physical education students. The knowledge acquired in the training curriculum, including in the human and social sciences, is not adapted to the needs of the profession nor to the purpose of teaching physical education. In this regard, we suggest that teachers take into consideration explicit examples of putting the acquired knowledge into practice in class, which develops technical-pedagogical skills in future teachers. This acquisition encourages effective and lasting learning and memorization of knowledge and know-how. For example, in psychology classes, students are expected to study and understand mental processes (stress, motivation, mental preparation) in order to optimize student learning. Mental preparation techniques in sports psychology, for example (visualization, breathing techniques, concentration tools) are effective levers for optimizing learning.

Thus, teamwork in class constitutes in my opinion an effective means of sharing knowledge between students and consolidating acquired knowledge. These explicit examples in class will allow students in social sciences classes to perceive the purpose of teaching physical education.

These principles can only be implemented on the ground on the condition that the training establishment (the Tunisian higher institutes of sport and physical education) as well as its actors ensure a minimum of functional articulation between these two aspects of training (theory and practice).

Furthermore, linking the social representations and pedagogical practices of student trainees would constitute another research direction. It seems relevant to us, in fact, based on a better knowledge of the social representation of university disciplines, in particular of shared common central values. This involves, in particular, through the quality of scientific and social dialogue within the university, as an absolute necessity. Knowing that there are, moreover, differences between school culture and family culture, the social representation of the subjects taught is based on common, basic and fundamental values, bringing together different sociocultural and sociolinguistic environments. It is a solid and unifying basis, conducive to developing and improving the teacher-student relationship.

References

- Abric, JC (2003). The structural approach to social representations, in Moscovici S. and Buschini F., *Methods of the human sciences*. Paris, PUF. 375-392.
- Abric, JC (2001). The structural approach to social representations: recent developments. *Psychology and Society*, 4-2, 83.
- Abric, JC (1994). *Social practices and representations*, PUF, 1994.
- Abric, JC (2003). The structural approach to social representations, in Moscovici S. and Buschini F., *Methods of the human sciences*. Paris, PUF. 378.
- Abric, JC (1994). Methodology for collecting social representations, in Abric JC, (Ed.), *Social practices and representations*, Paris, PUF. 4th ed, 67.
- Abric, JC (2003). The search for the central core and the silent zone of social representations, in *Methods of studying social representations*, Abric JC, (Ed), Ramonville, Editions Erès, 59-79.
- Abric, JC. (1994). Methodology for collecting social representations, in, *social practices and representations*, (under the direction of JC. Abric). Paris. PUF 74.
- Abric, JC (1998). The study of social representations of banking in France: a methodological approach, in V. Rigas, (Ed), *Social Representations and Contemporary Social Problems*, Athenes, Ellinika grammata. 3-10.
- Abric, JC (2003). The search for the central core and the silent zone of social representations, in *Methods of studying social representations*, Abric JC, (Ed), Ramonville, Editions Erès. 74.
- Boudon, Raymond, *Methods in sociology*, Paris, PUF, (coll. Que sais-je?), 1983.
- Boudon, R. (1986). Individualism and holism in the social sciences, in, *on individualism: theories and methods*, (under the direction of P. Birnbaum, J. Leca), Paris, Presses de la FNSP, 45-59.
- Boudon, R. (1979). *The logic of the social, introduction to sociological analysis*, Paris, Hachette Littérature, 89.
- Doise, W. (1986). Social representations: definition of a concept in the study of social representations, (under the direction of W. Doise and A. Palmonari), Paris, Delachaux and Niestlé, 81-94.
- Erbani, E. (1983). Influence of competitive sporting experience on the teaching practice of PE students. *Human Motor Review*, 3-11.
- Errais, B. (1970). Training of EPS executives in Tunisia. *Bulletin EP of the INS of Tunis*, n°17, pp 3-8.
- Kpazai, G. and Attikleme, K. (2012). The role of professional experience on the dimension of reflexivity in teaching: a case study of two secondary school physical education and health teachers. *Journal of Human Sport and Exercise*, 7, 254-262.
- Kaës, R. (1968). *Images of culture among French workers*. Paris. Cujas.
- Lapostolle, G. (2005). The orientation of students in college since the 1980s: a problem of political choice between two forms of democratization, no. 34, 415-438.
- Moliner, P. (2001). Formation and stabilization of social representations, in Moliner P. (Ed.), *The dynamics of social representations*. Grenoble, Presses Universitaires de Grenoble. 169.
- Moliner, P. (2002). Râteau Patrick and Cohen-Scali Valérie, *Social representations, practices and field studies*, Presses Universitaires de Rennes, 66.

Moscovici, S. (1961). *Psychoanalysis, its image, its audience*. Paris, PUF, 55.

Nasri, B., and Rouissi, M. (2022). Social representation inspector inspected in the Tunisian school system. *Journal of anthropological and archaeological sciences*. 7, 915-916.

Nasri, B., and Rouissi, M. (2022). Social representation inspector inspected in the Tunisian school system. *Journal of anthropological and archaeological sciences*. 7, 918-919.

Nasri, B., and Rouissi, M. (2022). Social representation inspector inspected in the Tunisian school system. *Journal of anthropological and archaeological sciences*. 7, 917-918.

Nasri, B., and Rouissi, M. (2022). Social representation inspector inspected in the Tunisian school system. *Journal of anthropological and archaeological sciences*. 7, 918-919.

Rekik, G. and Bali, N. (2017) Tunisian Physical Education Student Trainees' Agreement Rate about the Consistency between Initial Training and Integration during the Preparatory Internship for Professional Life. *Creative Education*, 8, 373-382. doi: 10.4236/ce.2017.83029.2

Souid, I. (2023). Physical Education Teachers in Tunisia Conception of Training Actors as a source of Vulnerability. *Journal of Education, Society and Behavioral Science*, Volume 36, issue 1, page 61-71.

Terrisse, A. (1999). The question of the link to knowledge with the educational learning process: the clinical point of view. *Carrefour Education*, 62-87.

Verges, P. (2001). Analysis of social representations using questionnaires. *French journal of psychology*, 43-2, 537-561.

Verges, P. (1994). Central core approach: quantitative and structural properties in Guimelli C., (Ed.), *Structures and transformations of social representations*. Paris, Delachaux and Niestlé, 105.

Zouabi, M. (2003). Evolution of the concept of physical and sport education in Tunisia. From INSEP (special issue), *L'Impres de Joinville*, Paris, 445-463.