

An Approach to the reality of Health, Safety, and Risk Prevention Training of future Early Childhood Education Teachers as Undergraduates at University Faculties of Education in Spain, as well as their perceptions on the subject. Part 2

Begoña Abecia¹ , José Luis Bernal² , Begoña Martínez-Jarreta³ 

¹Facultad de Educación y Grupo de Investigación GIIS-063 del Instituto de Investigación Sanitaria de Aragón, University of Zaragoza, Spain, ²Facultad de Educación University of Zaragoza, Spain, ³Grupo de Investigación GIIS-063 del Instituto de Investigación Sanitaria de Aragón, University of Zaragoza, Spain.

How to cite: Abecia B.; Bernal J. L.; Martínez-Jarreta B. 2024. An Approach to the reality of Health, Safety, and Risk Prevention Training of future Early Childhood Education Teachers as Undergraduates at University Faculties of Education in Spain, as well as their perceptions on the subject. Part 2. In: 10th International Conference on Higher Education Advances (HEAd'24). Valencia, 18-21 June 2024. <https://doi.org/10.4995/HEAd24.2024.17090>

Abstract

It has been observed that there may be a gap in the training of future school teachers in Spanish universities, which could potentially impact their ability to meet established European standards in promoting a culture of health and safety protection in societies. The aim of this study is to examine the perceptions of students enrolled in the Early Childhood Education degree (ECED) at Zaragoza University (UNIZAR) regarding the importance of the health-safety-risk prevention training during their undergraduate studies. Furthermore, to evaluate their satisfaction with the training received. To achieve this, an ad-hoc questionnaire was developed, validated and administered to all students who took the last ECED course at UNIZAR. 97.9% agreed that acquiring competencies in health-safety-risk prevention was important to them; 97.2% that the training received as undergraduates was insufficient. Students recognized the significance of acquiring basic competencies in health-safety-risk prevention and identify specific areas where further training is required.

Keywords: education; training; early childhood education; health, safety, risk prevention.

1. Introduction

The safeguarding of individuals' health and safety, both within and beyond the workplace, is a fundamental aspect of the policies of the most advanced nations. Consequently, in the European Community, the inclusion of health and safety education in training programs at all educational levels is considered a crucial requirement (Commission of the European Communities, 2007).

In 2013, EU-OSHA (European Agency for Safety and Health at Work) published a report titled “Safety and Health at Work and Education”. A “Whole-School Approach” on OSH (Occupational Health and Safety) was proposed based on the integration of risk education and safety and health management throughout the school’s activities as part of school life. Also actively involve staff and pupils in school safety management and improve both risk education and environmental training for staff and pupils.

The purpose of this approach is to promote the role of education in shaping citizens' understanding of health throughout their adult lives. As such, it was recommended that young children starting in nursery and kindergarten be progressively taught about general health concepts, safety, well-being, and social aspects, including work. Furthermore, it stated that the education of adolescents and young adults (vocational training, higher education) should focus on the gradual acquisition of social and professional competences that promote the concept of health, safety, and well-being at work and in life in general (Burgos, 2013; Burgos, 2014; Instituto Nacional de Seguridad y Salud en el Trabajo, 2018).

Teachers are seen as key actors in promoting and consolidating a culture of health and safety protection, which is seen as essential for achieving adequate social and economic development (Instituto Nacional de Seguridad y Salud en el Trabajo (INSST), 2018).

This is due to their fundamental role in education during the basic stages of life. Nevertheless, despite recent efforts in the Faculties of Education of the Spanish Universities still fall short of the established ideal in this respect. One highlighted deficit is the lack of basic health and safety training for teachers (Pisaniello et al., 2013; Caldas, 2018).

To improve this situation, it has been proposed to provide basic training in health, safety, and risk prevention for students in the Faculties of Education (Caldas, 2018). This would enable educators to contribute more effectively to their own well-being and to the health and risk prevention education of their students adapted to each level of education. Therefore, it is recommended that early childhood school teacher training includes very basic health and safety and risk-prevention skills (Instituto Español de Seguridad y Salud en el Trabajo (INSST), 2023).

It will enable teachers to promote essential learning for their pupils and contribute to the development of a culture of prevention. Additionally, to promote their own well-being as teachers at schools.

2. Objective

This study is part of a larger project that aims to comprehensively assess the state of health, safety, and risk prevention training in the Early Childhood Education (ECE) Teaching degree across the Faculties of Education of public Universities in Spain.

The current survey is aimed to examine whether students enrolled in the ECE program at the University of Zaragoza consider health, safety, and risk prevention training during their undergraduate studies to be important for their future careers as teachers. Additionally, to determine whether the training received on this subject is perceived as sufficient for their prospective role and functions as ECE school teachers.

3. Material and Methods

To accomplish this objective, a two-phase quantitative study was conducted:

3.1. Phase 1

The study developed and validated an ad hoc questionnaire to gather data from final-year Early Childhood Education (ECE) students at the Faculty of Education, University of Zaragoza. The questionnaire was devised following a review of modification requests for verification reports of Bachelor's Degrees in ECE and Primary Education, forming the initial phase of the research. A qualitative approach was employed, involving collaboration with two expert groups: professional teachers in ECE and Primary Education (n: 6-10), and occupational health and safety experts (n: 6-10). Feedback from both groups was collected to refine the questionnaire, resulting in a unified version incorporating all suggested improvements. This iterative process led to the development of a validated questionnaire, detailed further in the subsequent sections.

Between September and December 2020, a pilot study was conducted to validate questionnaires for final-year Bachelor's Degrees in Early Childhood Education and Primary Education students at the University of Zaragoza. The study utilized Survey Monkey for online administration, with 101 participants. Optimal scaling analysis using CATPCA was employed to validate the questionnaires, resulting in four factors. These factors included perceived training needs, risk prevention training sufficiency, and the relative importance of risks for students. Cronbach's Alpha coefficients indicated good internal consistency for the first two factors and acceptable consistency for the third and fourth factors.

3.2. Phase 2

We obtained data related to the research objectives by administering an ad hoc questionnaire to all final-year university students in the ECE Teaching degree program at the Faculty of Education, University of Zaragoza (academic course 2020-21). The administration was carried out via email before the end of the academic year, under the supervision and approval of the *University's Data Protection Service*, following the established official procedure. The questionnaire was completed by final-year ECE Teaching degree students (n=96) at the Faculty of Education of the University of Zaragoza, representing 80% of the total enrolled students in this course.

Table 1. *Dependent variables of the questionnaire.*

Question	Dependent variables
Q1	University
Q2	Age
Q3	Gender
Q4	Degree specialization
Q5, Q6, Q7	Previous academic background
Q8, Q9, Q10	Work experience
Q13	Having taken a subject related to health
Q14	This subject (P13) was aimed at training future students in health.
Q15	This subject (P13) was aimed at training future students in safety.
Q16	This subject (P13) was aimed at training future students in risks and their prevention.
Q17	This subject (P13) was aimed at training future students in teacher well-being.
Q18	This subject (P13) was mandatory/optional.
Q19	Name of the subject (P13)
Q21	Training received on the "prevention culture"
Q22	Training received on the importance of establishing a "prevention culture"
Q23	Training/information received during the degree to establish the prevention culture.
Q24	Training/information received about freely available teaching materials to educate future students about health, safety, and risk prevention.
Q27	Training/information received on the "Whole School Approach"

Table 2. *Independent variables of the questionnaire.*

Question	Independent variables
Q11	Basic training in the degree program on health, safety, and risk prevention
Q12	Assessment of common risks faced by education professionals
Q20	Importance of incorporating basic content on health, safety, and risk prevention in early Childhood Education
Q25	Agreement with the recommendation for progressive education on health, safety, and risk prevention in schools
Q26	Importance of providing future teachers with basic training in their degree studies on how to educate their students in school regarding health, safety, and risk prevention.
Q28	Ranking of the importance of different health, safety, and risk prevention content in the education of early childhood students
Q29	Perception of having received sufficient training on risks during the Early Childhood Education Teaching degree
Q30	Information or training received during the Early Childhood Education Teaching degree on health, safety, and risk prevention

4. Results and Discussion

99% of the total sample were female. Furthermore, of the total number of students who responded to the questionnaire, 84.4% were between 20 and 25 years old and the rest >26.

40.6% had previous academic training, be it another university degree, an intermediate degree, a higher degree or other. Within this group, 66.7% had received training in safety and risk prevention. This means that 25.99% of the total sample had received safety and risk prevention training in their previous studies.

61.5% were working or were working at the time of the questionnaire, with 59.3% working in education and 15.3% in hotels and restaurants.

Table 3. *Employment sectors in which fourth-year ECE Teaching students at the University of Zaragoza have worked or were working in the 2020/2021 academic year.*

Sector	N	%
Education or education-related	35	59,3
Hospitality	9	15,3
Public-facing jobs	8	13,6
Health or care work	4	6,8
Other	3	5,1
Total	59	100,0

Of this group of students who had worked or were working, 36% said they had received safety and risk prevention training in their job. However, of the total sample, 21.25% said that they had received safety and risk prevention training in a job that they had done or were doing at the time of responding to the survey.

4.1. Cultural Preventive Training

4.1.1. Prevention culture

62.5% of the surveyed individuals reported not having received any information or training on the need to establish a 'prevention culture' in our society. Additionally, 66.7% stated that they had not received any information or training on the need to establish a 'prevention culture' in schools from the early stages of education. 69.8% reported not having received any information on these recommendations during their ECE Teaching degree training.

4.1.2. Whole school approach

92.7% stated that they had not received any information or training on the school as an integral prevention element or 'whole school approach' (European Agency for Safety and Health at Work, 2013) during the degree.

4.1.3. Assessment of a number of common risks faced by teachers

54.2% gave the highest priority to risks related to psychosocial factors and stress (burnout, harassment, organisation and complexity of work, etc.) whereas 7.7% gave the highest value to the risk of voice problems: dysphonia.

It is interesting because of the mismatch between their assessment and the reality of the prevalence and frequency of these health problems among teachers, given that in Spain *the voice disorder* or *dysphonia* is the most common occupational disease in teachers (Moreno-Chaparro, 2023).

4.2. Formation of Students at School

4.2.1. Evaluation of different contents related to safety, health and risk prevention in the education of pupils in early childhood education

96.9% agreed with the recommendation for progressive training of pupils at school.

In terms of the value given by the respondents to the items that should be taught in early childhood education, the least valued content was 'Drugs' (72.9% of the respondents gave the lowest importance to this content), which also coincides with the least valued item by the sample when it comes to including it in the training of early childhood educators, "Substance or drug use" (60.5% believe that content on substance or drug use should be included in the ECE Teaching degree.) The same is true for "Risks associated with the use of computer screens and new technologies". These values may be due to the fact that future teachers do not consider these risks to affect pupils in early childhood education.

4.3. Training future teachers in Early Childhood Education

4.3.1. Undergraduate training

69.8% stated that they had received training in a health-related subject or area during their ECE Teaching degree studies, 98.5% of which was a compulsory subject. Of this group, 83.6% said that this subject or course was intended to prepare them to contribute to the training of their students in health issues.

In relation to the health, safety and risk prevention, 92.7% of respondents felt that they had not received "sufficient" information and/or training on these items during their ECE Teaching degree.

The content in which they have received the most training ("basic hygiene and nutrition habits", 88,5%) coincides with the most valued content in the list of items.

4.3.2. Importance of basic health, safety and risk prevention training during undergraduate studies

97.9% considered important that future teachers receive basic training during their undergraduate studies in how to train pupils at school in health, safety and risk prevention.

99% agreed or strongly agreed that the ECE Teaching degree should include basic training on how to protect themselves against the risks normally associated with teaching, to know the typical and common risks in their profession, and to know questions of interest relating to accidents at work and occupational diseases.

5. Conclusions

The quantitative study carried out has allowed us to verify that among the students of the University of Zaragoza ECE Teaching degree:

- 97.9% considered important for future teachers to receive basic training during their studies on how to train pupils at school in health, safety and risks prevention.
- 96.9% agreed with the recommendation for progressive training of school pupils in health, safety and risk prevention (basic training).
- 99% thought that basic training should be provided at MEI level on how to protect themselves as teachers against the various risks to which they are exposed in their work.
- 92.7% stated that they had not received any training or information on the "whole school approach" and 62.5% denied having received any training or information on the "culture of prevention".

With regard to the assessment of the importance of the different health, safety and risk prevention items they were asked about:

The respondents may have had a more favourable rating and given a higher degree of importance for the risks that they reported having received training on.

The results show that there is a lack of training in health, safety and risk prevention and in the well-being of teachers.

It should be considered to establish a common curriculum for all ECE Teaching levels in order to ensure a minimum and compulsory basic training in health, safety and risk prevention and in the protection of the health or well-being of early childhood education teachers, as it has been proposed (European Commission, 2021) (Instituto Nacional de Seguridad y Salud en el Trabajo -INSST, 2023).

References

- Burgos, A. (2013). Prevención de riesgos laborales en los centros educativos: análisis de los sistemas de formación. *Revista de Educación*, 361, 37-64.
- Burgos, A. (2014). Análisis de la cultura de prevención de riesgos laborales. *Revista Educar*, 50(2), 285-321.
- Caldas, M. E. (2018). *Prevención de riesgos laborales en el sector docente*. Madrid, España: Ministerio de Educación, Cultura y Deporte, Subdirección General de Documentación y Publicaciones.
- Commission of the European Communities (2007). *Community strategy 2007-2012 on health and safety at work*. Brussels, Belgium.
- European Agency for Safety and Health at Work (2013). *Occupational safety and health and education: a whole school approach*. Luxembourg: Publications Office of the European Union.
- European Commission (2021). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions empty. EU strategic framework on health and safety at work 2021-2027-Occupational safety and health in a changing world of work*. Brussels, Belgium. European Union's Health Programme. (s. f.). Retrieved 12 April 2023, from <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0323&qid=1626089672913#PP1Contents>
- Instituto Nacional de Seguridad y Salud en el Trabajo (INSST) (2018). *La seguridad y la salud como materia de enseñanza en la seguridad Primaria. Guía para el profesorado*. Madrid, España: Servicio de Ediciones y Publicaciones del INSST.
- Instituto Nacional de Seguridad y Salud en el Trabajo (INSST) (2023). *Estrategia Española de Seguridad y Salud en el Trabajo, 2023-2027*. Madrid, España: Instituto Nacional de Seguridad y Salud en el Trabajo.
- Moreno-Chaparro, J., Franco-Ibarra, L., Rojas, B. E., Guzmán-Suárez, O. B., Suárez-Vega, H. R., Díaz-Ruiz, J. A. (2023). Enfermedades de Origen Laboral en Docentes Escolares: Una revisión sistemática. *MÉD.UIS*, 36(1), 35-51. DOI: <https://doi.org/10.18273/revmed.v36n1-2023003>
- Pisaniello, D. L., Stewart, S. K., Jahan, N., Pisaniello S. L., Winefield, H., Braunack-Mayer, A. (2013). The role of high schools in introductory occupational safety education - Teacher perspectives on effectiveness. *Safety Science*, 55(1), 53-61.