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# INVESTIGATION OF CHANGE IN AWARENESS OF KINDERGARTEN STUDENTS ON OCCUPATIONAL HEALTH AND SAFETY AFTER A SPECIAL TRANINING PERIOD

Berna GÜR<sup>1</sup> Tuğrul YILDIRIM<sup>2</sup>

<sup>12</sup>Hitit University, Vocational School of Technical Sciences, Department of Property Protection and

Security Çorum/Turkey

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Complaints: hjohs@hitit.edu.tr

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# INVESTIGATION OF CHANGE IN AWARENESS OF KINDERGARTEN STUDENTS ON OCCUPATIONAL HEALTH AND SAFETY AFTER A SPECIAL TRANINING PERIOD

# Berna GÜR<sup>1</sup> Tuğrul YILDIRIM<sup>2</sup>

<sup>12</sup>Hitit University, Vocational School of Technical Sciences, Department of Property Protection and Security Çorum/Turkey

\* Corresponding Author: First Author, E-mail: bernagur@hitit.edu.tr; Phone: +905413596102

## ABSTRACT

The management goals of all countries in the world include the absence of health and safety problems. According to the World Health Organization (WHO), health is defined as "the state of being in complete physical, mental and social well-being and the absence of disease and infirmity. The dissemination of OHS should be essential to ensure health and safety in our entire society, starting with our children, who make up our future.

In this study, it is aimed to create an OHS culture among students in some specified kindergartens in Corum by giving OHS training compatible with the age. The significant part of study is to ensure the permanence of culture by converting it to a behavior. Growing up with OHS culture and making OHS a philosophy of life for kindergarten students, who are the employees of the future, will help our country to minimize the number of occupational accidents and diseases in the coming years. As a result of the study, it is aimed that the students gain OHS basis that they can use both in school and daily life and to adopt the OHS culture.

Keywords: Occupational Health and Safety, Kindergarten, Education, OHS Awareness

#### INTRODUCTION

Education is a planned action system that provide changes in human behavior in line with the determined principles. Education is the process of creating a deliberate desired change in the behavior of individuals because of their own experiences. (http 1)

The progression of cognitive, physical, social and emotional areas as inseparable links is called development (Akalın, 2021). Societies are in constant change. This change is visible depending on the fact that both social and cultural changes are visible. One of the most important of various factors directing these social changes is education (Ahi and Kıldan, 2013).

Pre-school education is the process from the birth of the child to the day when basic education starts. During this time; physical, psychomotor, socialemotional, mental and language development of children, which has a great role in their maturation and their further lifetime, is complemented and their personality is configured through the training provided (Deretarla Gül, 2018).

The period in which the child develops rapidly in all areas is the early childhood period. When the child is born, he/she is in a social relationship only with his/her parents, but the educator and the peer group are included in this relationship from the beginning of the early childhood (Akalın, 2021).

Along with the new production methods and technologies, which are indispensable for the industry today, difficulties that manifest themselves as occupational accidents and diseases regarding OHS have also begun to emerge. As these difficulties cause personal, social and organizational losses, the significance of OHS is increasing day by day (Koçali, 2022). Main purpose of OHS in modern business environments is to eliminate occupational accidents and diseases by providing a safe working environment. Situations that may pose a danger both in the working environment and in terms of the health and safety of employees can only be prevented by taking precautions. Therefore, giving OHS trainings in order to create a safety culture for people before they start their career occupy an important position considering to prevent possible accidents (**Çırakoğlu** Kelleci and Taş, 2022).

Youngers in the just beginning of their careers are more at risk. They are unfamiliar with the workplace and the job they are going to do. Therefore, they are inexperienced about the health and safety risks that will negatively affect them.

Physical and mental development is not matured for youngers, therefore they may lose attention very quickly. They are prone to take existing risks because of inexperience. Due to reasons lack of occupational health and safety awareness as well as others mentioned, it is imperative to create both behavioral change and OHS awareness in students (Tuna and Ulutaşdemir, 2022).

In the studies carried out, it was emphasized that education should be important in order to develop the prevention culture, which is one of the occupational health and safety strategies of the EU. Moreover, OHS training should be given when the employee enters the business life, and should be included in the school curriculum. Providing occupational health and safety for the employees of the future will be possible with the inclusion of OHS in the curriculum (Tuna and Ulutaşdemir, 2022).

Occupational health and safety awareness should be created for the O-6 age group, i.e., the early Investigation of Change in Awareness of Kindergarten Students On Occupational Health and Safety After A Special Tranining Period

childhood, during which the development of children is very rapid. The awareness created at this period is very important in terms of creating an adopted OHS culture and awareness for future. In societies where OHS awareness, consciousness and culture are settled, there will be reductions in direct and indirect losses depending on the occupational accidents and diseases.

The purpose of assessment and evaluation in early childhood is to follow the development of the child throughout education and to identify children with special needs. Considering the development of children in this age group, it is better to exploit the different measurement and evaluation approaches from other education levels (Işıkoğlu Erdoğan and Canbeldek, 2017).

#### MATERIAL AND METHODES

In our research, interview technique was used within the scope of the qualitative method-based method. Meeting covers conversations between two or more people to learn about the behaviors, situations, feelings or perspectives in line with the scope of study. There are different types of interviews depending on the number of people participating in the interview (individual or group) and whether it is planned or not (structured or unstructured) (Işıkoğlu Erdoğan and Canbeldek, 2017).

Interviews made by preparing open-ended and flexible questions are semi-structured interviews. In semi-structured interviews, predetermined questions are asked regularly and in a special order. However, the people who conducted the study may ask questions beyond the concept in order to direct the research (**Özde** et al, 2023).

While the universe of the study consists of all kindergartens in Çorum, the sample of the study consists of 418 students who are educated in two kindergartens in Çorum, which only provide education as a kindergarten.



Figure 2. Various activities in kindergarten



Figure 3. Various activities in kindergarten

In the study, nine open-ended questions were prepared for the use of the interview method. These questions were asked to the students twice, first to determine the occupational health and safety awareness and readiness levels of the children, and the second is to determine the changes in their awareness levels after the OHS training. The goal is to observe the change in the awareness of the students depending on the answers with the training given. Predetermined questions are asked by making meeting playful in their own environment suitable for the developmental level of the children.

The study consists of three parts. In the first part, students were asked pre-prepared open-ended questions by showing health and safety signs and personal protective equipment (PPE) compatible with them. Moreover, directive questions were asked about what these health and safety signs mean, where they see these signs, who uses the displayed PPE and what it does. The answers given to the questions asked were written by coding (Table 1). In the second part, the meanings of the 10 existing health and safety signs, where they are used, the names of PPEs and what benefits they provide when used are explained. These signs and their meanings are as follows.

Health Safety Signs	PPE	Meanings
GAZ MASKESI KULLAN	FOR	Use appropriate gas mask in hazardous environ- ments such as corrosive, irritating and toxic gases
BARET GIY		Use a helmet to protect the head against the pos- sibility of a blow to the head (collision, object fall- ing, etc.) and falls.

Table 1. Health Safety Signs and Personal ProtectiveEquipment

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IŞ ELDİVENI GİY		Use work gloves to protect the hand against impacts, especially when working with harmful chemicals.
İŞ GÖZLÜĞÜ KULLAN	9	Use goggles when work- ing with chemicals or in dusty environments.
DİKKAT FOSFORLU YELEK GİY		Wear a work vest (jacket) against being noticed or chemical splashes, espe- cially at night and in dark environments.
GÜRÜLTÜLÜ ALAN KULAK TIKACINI KULLAN	ESSAFE	Use earplugs in noisy envi- ronments
KULAKLIK TAK		Wear business head- phones in very noisy envi- ronments
TOZ MASKESI TAK		Use a dust mask when working in dusty environ- ments.
		Use to indicate slippery floors or areas where there is a constant risk of slipping, especially after cleaning.
YANGIN SÖNDÜRÜCÜ		Use to indicate the loca- tion of the fire extinguish- er
		Use it for directions for emergencies.

In the third part; the questions posed in the first part were asked again after the training. Question can be given as what the meanings of the health and safety signs are, what they do, where and by whom they are used, and what their benefits are. After questions about all health and safety signs and getting answers, children were asked to find the health and safety signs in the coloring books prepared by the General Directorate of Occupational Health and Safety, and were asked to match and paint the relevant picture. By this way permanent learning was expected to achieve.

### RESULT

Responses to 10 health and safety signs and PPEs directed to students before the first part of the training;

• Responses to safety vests are received mainly from the students as "my uncles wear it, miners wear it, builders wear it, my father also wears it". It is noted that they did not have any idea about what it was used for.

• The answers to the safety glove were mostly "snow glove or dishwashing glove". As for what it was used for, they replied: "To protect our hands from the cold, not to get cold and not to harm our hands".

• While most of the students could not respond to the gas mask at all, four students answered that "it is put on the mouth to protect from smoke".

• When the fire extinguisher sign is showed, the answers are received from all of the students for the same that " fire extinguisher and it is used to extinguish the fire". The reason for the correct answers received from each student is because of that the students had recently received practice for emergency situations and during this training, the fire extinguisher was introduced.

• When the protective helmet is shown, the answers are "hat and helmet". To the question of why it is used, they answered "to protect our heads, not to harm our heads".

• They gave the answer "sunglasses and prescription glasses" to the safety glasses shown. When asked why we use it, they answered "to see, to protect our eyes from the sun".

• Almost all of the students gave the answer to the slippery floor sign shown, "This is the sign of the slippery floor, we see it in the shopping mall and in the cafeteria, it was placed so that we do not slip".

• Almost all of the students replied to the dust mask, " we cover our mouth and nose to protect ourselves from Covid and diseases by this mask."

• We have difficulty getting a response from the students to the earplugs shown. They state that they did not see it and did not know what it was used for.

• Some of the students answer the

• emergency exit door health safety sign as "running man and some as exit door". As for why it should be used, they answer, "Mustn't run", and three students answer as " to exit in emergencies".

The answers given to the 10 health safety signs and PPEs directed to the students after the third part of the training are;

• The answers to the safety vest are "We should wear it while working in order to be noticed and seen in the dark". The painting activity was carried Investigation of Change in Awareness of Kindergarten Students On Occupational Health and Safety After A Special Tranining Period

out by finding the relevant health safety sign from the coloring book by all students.

• They answer that "we should wear it on our hands to be protected from chemicals and to be protected from infectious diseases" for the question about safety glove. 98% of the students performed the painting activity by finding the relevant PPE in the coloring book.

• The statements "necessary for protection from dangerous gases, clean air and breathing" to the gas mask are the answers from the students. The activity was carried out by finding the relevant health safety sign and the relevant PPE in the coloring book by 80% of the students.

• When the fire extinguisher sign is shown, the answer is "used to extinguish the fire". As before the training, 99% of the students gave correct answers after the training. The painting activity was done by finding the picture about the fire tube in the coloring book.

• From the health safety signs to the helmet picture, 82% of the students answer, "We wear it so that we don't get hurt by anything, the construction workers wear it," and found the relevant picture and carried out the painting activity.

• 92% of the students answer the safety glasses sign as "it is used to protect the eyes from chemicals while they are working", and the painting activity was carried out by finding the relevant picture in the coloring book.

• To the slippery floor sign, 98% of the students give the answer that "it is used in cleaning time, it warns us not to slip, it is necessary on wet floors". The painting activity is carried out by finding the relevant health safe sign in the coloring book.

• When a dust mask, which is one of the PPEs, is shown, 25% of the students still replied, "While they renew their answer to protect from Covid", 70% of them reply as "should use it to prevent dust from getting into our mouths, not to cough, and to get fresh air".

•To the emergency exit direction sign, which is one of the health safety signs, 89% of the students answered "it shows the escape route, its lamp flashes in case of emergency".



Figure 2. Coloring books published to raise awareness of "Occupational Health and Safety" of the Ministry of Labor and Social Security.

#### **CONCLUSION AND FUTURE PROSPECTS**

In the first part of the study, it was determined that the level of readiness of the students was very high when they were faced with questions about the concepts they had learned during the training they had previously received for emergencies, while the level of readiness due to their OHS awareness was found to be negligible. From the answers given to the questions about health safety signs and PPEs directed to the students before the education. it was concluded that there is no OHS-based education in the pre-school education. As a result of the OHS training given, it has been determined that almost every child has the highest level of OHS awareness. This determination has shown us how important education is for the adoption of OHS by every individual in our country. According to this;

• In order to create OHS awareness and create safety culture in our society, we need to start with our children, who form the future of society.

• OHS education should be started at the preschool education level earlier than the compulsory education levels (primary and secondary education).

• OHS basic training must be included in the curriculum to be repeated at certain periods at every education level.

• In order to ensure the permanence of OHS education and awareness in preschool children, it is necessary to include and adopt OHS as a part of life.

• In pre-school education, the families together with the children should be included in OHS training and a basis should be provided for permanent behavior change.

• In the pre-school education, where the concrete concept is effective, the measurement and evaluation of the OHS trainings given should be done in accordance with the age and the missing information should be given by repeating.

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#### REFERENCES

- Akalın, N. (2021). (Doktora Tezi). Yaratıcı Drama Eğitim Programının Çocukların Sosyal Davranış ve Sosyal Problem Çözme Becerilerine Etkisi. Hacettepe Üniversitesi, Eğitim Bilimleri Enstitüsü.
- Berat, A. H. İ. and Kıldan, A. O. (2013). Türkiye'de okul öncesi eğitimi alanında yapılan lisansüstü tezlerin incelenmesi (2002-2011).
- Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 1(27), 23-46.
- Çırakoğlu Kelleci S. and Taş, B. (2022). İş Sağlığı ve Güvenliği Eğitiminin Peyzaj ve Süs Bitkileri Yetiştiriciliği Programı Öğrencilerinin Bilgi ve Farkındalıklarına Olan Etkisi. Uluslararası İnsan ve Sanat Araştırmaları Dergisi, 7(4), 317-329.
- Deretarla Gül, E. (2008). *Meşrutiyet'ten günümüze okul* öncesi eğitim. Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 17(1), 269-278.
- https://tr.wikipedia.org/wiki/Eğitim. (Erişim tarihi: 20.03.2023)
- Işıkoğlu Erdoğan, N. and Canbeldek, M. (2017). Erken Çocukluk Eğitiminde Ölçme ve Değerlendirme. Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi, 17 (3), 1306-1327.
- Koçali, K. (2022). 6331 Sayılı İş Sağlığı ve Güvenliği Kanunu Sonrası Lisansüstü Tezlerin Değerlendirilmesi. Hastane Öncesi Dergisi, 7 (1), 63-80. Doi: 10.54409/ Hod.1078292
- Özde, H. Ö., Cerrahoğlu, N. and Kurak, K. (2023). Beden Eğitimi Öğretmenlerinin Beden Eğitimi ve Spor Dersinde Öğrencilere Kazandırmış Olduğu Değerlere Yönelik Görüşlerinin İncelenmesi. Yalova Üniversitesi Spor Bilimleri Dergisi, 2(1), 87-99.
- Tuna, H. and Ulutaşdemir, N. (2022). İş Sağlığı ve Güvenliği Dersinin Staj Yapan Öğrencilerin Güvenlik İklimi Algılarına Etkisi (Doğu Karadeniz Bölgesi Örneği). Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi, 11(2), 730-737.

#### SUPPLEMENTARY FILES

Supplementary File 1: Institution Work permit



T.C. ÇORUM VALİLİĞİ İl Millî Eğitim Müdürlüğü

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Bilgilerinizi arz ederim.

Şerif DOĞAN Müdür a. Şube Müdürü

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