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Evaluation of School Occupational Health and Safety Practices Performance Indicators by School Administrators*

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Abstract

The aim of this study is to determine school Occupational Health and Safety [OHS] performance indicators by revealing the opinions of school administrators about the effectiveness of OHS implementation. In line with this purpose, a semi-structured interview form was created. This method was applied randomly to ten school administrators working in public and private, primary, secondary, and high schools with 50 or more employees affiliated to the Ministry of National Education [MoNE] with criterion sampling, one of the purposeful sampling method types. Because of the analyses, six main categories were reached: OHS Education Effectiveness, OHS Awareness, OHS Material Effectiveness, OHS Managerial Effectiveness, Teacher and Student OHS Attitudes and Behaviors, and OHS Effectiveness in Pandemic. The main category of OHS Material Effectiveness is divided into three subcategory: "Visual Material intelligibility", "Visual Material Effectiveness", "OHS Material Use Adequacy". OHS Managerial Effectiveness: It was divided into two subcategory: "Managerial Duty and Responsibility Awareness" and "Managerial Problems Encountered and Solutions". It is expected that the findings will greatly contribute to the creation of indicator of school OHS performance. At the end of the research, researchers may be advised to The Occupational Health and Safety Management System [OHSAS] can be developed only for schools and studies on school safety coaching can be conducted.

Keywords: Performance, occupational health and safety, school occupational health and safety, teacher.

Introduction

While the concept of "occupational safety" refers to the protection of workers against technical risks, "occupational health" means keeping and maintaining the physical, mental, social, moral, and well-being of all employees at the highest level. To achieve this in workplaces, it is necessary to eliminate bad health conditions and protect against adverse conditions. Employees should be placed in suitable jobs physically and spiritually, work should be adapted to the person and the person to the job should be ensured. Occupational safety, on the other hand, is defined as the technical and systematic studies carried out to investigate and eliminate the damages and malfunctions that may occur in the workplaces due to the work practices and during the work to ensure the continuity of the work (Demir, 2006).

With the Industrial Revolution, people working in very poor working conditions and in great danger were faced with work accidents and occupational diseases. Over time, with the development of technology and protective tools, a safer working environment has been created. However, as time progresses, new risks have emerged that endanger the occupational health and safety of employees (occupational health and safety culture, legislation and operational problems, etc.) (Kılıç, 2014).

In the twentieth century, developments regarding Occupational Health and Safety [OHS] have become an issue that concerns the entire world. The International Labor Organization [ILO] within the United Nations [UN] has conducted important studies on OHS related issues. With the agreement signed between the UN and the ILO in 1946, the ILO became a specialized agency. The ILO and the World Health Organization [WHO] and many organizations that cooperate with these organizations have carried out important studies in terms of occupational health and safety. The "exposure values in the workplace" determined

for chemical substances by the ILO, of which our country is also a member, the decisions taken on occupational health and safety, and the international agreements created have contributed to the solution of OHS problems (Çetindağ, 2010).

In accordance with Article 4 of the Occupational Health and Safety Law No. 6331, the employer is obliged to inspect whether OHS-related health and safety measures are complied with and to ensure that any problems that arise are resolved. According to the 10th article of this law regarding risk assessment, necessary control, measurement, and examination must be carried out to eliminate the risk factors to which the working environment and employees are exposed in terms of OHS. According to the 8th article of the Regulation on Occupational Health and Safety Committees, the main duty of the OHS committees is to prepare a draft OHS internal directive suitable for the nature of the organization and submit it to the approval of the employer or employer's representative. Observing the implementation of the prepared directive, reporting the results of the observations, ensuring that the measures to be taken are determined, preparing an annual report on the current situation of the workplace regarding OHS, evaluating the studies related to the previous year, and collaborating with other institutions are among the other duties of these boards (Law on Occupational Health and Safety, 2012).

These OHS practices provide a safe education and working environment by keeping employees and learners in educational institutions away from stress, anxiety, and danger. This situation will provide a safe school environment for individuals by purifying the school from the dangers and risks that may arise. The feeling of physical and psychological comfort and peace of teachers, students, and staff is expressed through the concept of school safety. Therefore, a safe school environment to be created with OHS practices is considered important in terms of making individuals feel more comfortable and showing their performance in the best way (Çay, 2019).

The goal of the school safety plan is to create and maintain a school climate where success is rewarded and all students thrive in an environment free from dangers, violence, harmful addictions, and fear, where teachers can teach and students can learn (Stephens, 1998). All the practices that school administrators need to do regarding school safety are necessary precautions for the climate, culture, and educational qualities of the school. This is the purpose of the plans for school safety.

There have been studies on OHS practices applied in schools and their results, but no study has been found on OHS performance, which is used in other sectors where OHS is practiced and enables the effectiveness of OHS practices to be determined and their deficiencies to be revealed. In this context, it is necessary to develop a performance scale to evaluate whether the OHS management is effective enough on issues such as the school administrators', school's teachers, students, and employees' awareness and awareness levels on OHS and their views on OHS practices in schools, as well as the school's compliance with OHS criteria and cooperation between employees. It is thought that it will make a great contribution to managers. On the basis of this assumption, an in-depth examination of OHS practices in schools, development of a performance scale, and due diligence were found worthy of research.

Method

In this part of the research, the model followed in the research, the universe and sample/research group of the research, data collection tools, details of the application/procedure process, and how the collected data were analyzed are explained.

Model of The Research

It was desired to make an in-depth analysis of the situation to be investigated with the qualitative research method, and in this direction, the study was carried out with the 'phenomenology' design, which provides the opportunity to examine the desired phenomenon in depth. This pattern focuses on phenomena that we know about but do not have a detailed and in-depth understanding of (Yıldırım & Şimşek, 2016). Phenomenological research is handled in two ways. These are descriptive and interpretive phenomenological approaches. Descriptive phenomenology was preferred because the main purpose of the research was to describe the opinions and experiences of the school principals participating in the research on OHS practices (Ersoy, 2017). In this context, a semi-structured interview form was applied to examine the OHS practices of school administrators in depth. The data obtained were analyzed using the NVIVO program.

Sample Selection

The universe of the study was determined as the schools throughout Istanbul with 50 or more employees who perform OHS practices (Occupational Health and Safety Law, 2012). Since it is not possible to reach the entire universe in line with time and possibilities, the sample was determined (Yıldırım & Şimşek, 2008). In the 2021–2022 academic year, 25 (64.1%) of 39 districts in Istanbul are on the European side and 14 (35.9%) are on the Anatolian side (Ministry of National Education Statistics, 2020). Within this ratio, six districts from the European side and three districts from the Anatolian side were determined using the stratified sampling method at the rates of 25/39 and 14/39, which is a sampling type that aims to represent the strata or subgroups in the population in proportion to their weight in the universe. Within the proportions of the selected strata, the districts in Istanbul were selected randomly by drawing lots using simple random sampling methods (Büyüköztürk et al., 2012 as cited in Koç, 2017). Six districts (Esenyurt, Silivri, Bahçeşehir, Fatih, Büyükçekmece, Esenler) from the European side and three districts from the Anatolian side (Kadıköy, Üsküdar, Kartal) were selected. Schools with 50 or more employees were randomly determined by criterion sampling (Patton, 1990), which is one of the purposeful sampling methods used in primary schools, secondary schools, science high schools, Anatolian high schools, vocational high schools, and imam atip high schools in these districts. The semi-structured interview form prepared for qualitative research in the selected schools was applied to the school administrators determined as the study group in these schools. The criterion for participation in the study group was based on the condition of being a school administrator with 50 or more employees, since it was stated that the school administrator would act as the employer's representative in schools with 50 or more employees in accordance with the OHS regulation (Ministry of National Education [MoNE], 2014). According to Creswell (2017), the number of participants to whom the form will be applied in phenomenology should be between 3 and 10. In line with this information, 10 school administrators working in the specified schools were

included in the study. Considering the demographic characteristics of school administrators, the number of school administrators who are female have a seniority of more than 10 years, work in secondary schools and have a master's degree is low.

Data Collection Tool

Under this title, detailed information about the data collection tools used in data collection and the data collection process have been expressed.

Semistructured Interview Form

In line with the OHS practices of school administrators, a "semi-structured interview form" was used, which included eight open-ended questions, which were prepared to examine in depth the OHS practices in schools within the scope of the negativities, deficiencies, and solutions they created against them. Semi-structured interviews help the participant to answer the posed questions more easily and allow the researcher to make changes when posing the questions when the participant deems it necessary (Yıldırım & Şimşek, 2016). In semi-structured interviews, the researcher is the listener, while the participant answers the questions. The questions in the semi-structured interview form were first formed by examining the laws, regulations, and studies in the field, paying attention to reflect the research subject in the best way possible.

To determine whether the draft form of the developed interview form is qualified, suitable for research, and understandable, the content validity of the subject to be researched, and whether there are any questions to be corrected, removed, or added, it was shared with two professors, two doctoral faculty members, three doctoral students, three OHS experts, and two Turkish language experts. Then, according to expert opinions, questions were removed from the draft interview form, new questions were added, and the semi-structured interview form was finalized by making arrangements in line with the suggestions regarding the questions that were difficult to understand. In this direction, a semi-structured interview form called "Occupational Health and Safety Practices of School Administrators" consisting of eight open-ended questions was created. Before the interviews with the school administrators who will be in the study group, a semi-structured interview form was applied to two randomly selected school administrators to evaluate their intelligibility. Necessary corrections were made for possible problems that emerged after the application and the semi-structured interview form was finalized.

In qualitative research, validity is the degree to which the problem to be investigated is resolved objectively. In this context, it is of great importance to determine to what extent the data obtained in the research reflect reality. Examining the study problem as a whole and revealing the details of the phenomenon to be investigated are important criteria for establishing validity. In addition, in the interviews with the participants, in order to better understand the situation, "Is this what you mean?" or "Is this what I should understand from your words?" With questions such as, the consent of the participant was obtained and the validity was increased. In qualitative research, validity is examined in two ways: internal and external. Internal validity: It is the adequacy of the process followed in reaching the final results of the research, about how much the study reveals the real situation. "Do the

researcher's work, observed and tried to understand events or phenomena reflect the real situation in detail? Are the research findings meaningful and consistent? Are there specific rules, principles, or strategies used to verify the validity of the findings? Are there any facts or events that are unclear or whose relationships have not been defined? Were the findings found realistic by the participants?". Internal validity was increased with questions similar to these. In addition, approaches such as interacting for a certain period of time in the research environment and participant confirmation positively affect internal validity (Baltacı, 2019). In this context, observations were made by spending time in these schools to obtain information about the progress of OHS management and practices in the schools in the sample group where the research will be conducted. In addition, before starting the interviews, some data transferred to the text were reviewed by the school administrators and the qualitative analysis was carried out. Thus, if there were thoughts that the school administrators could not express during the interview, they were added to the data collection form and necessary arrangements were made.

External validity: refers to the generalizability of the research findings. It has been argued that cases are similar at similar times, whereas similar events are universal if they can produce similar results at different times. In this context, the limited generalizability of the research can be seen as a problem for a researcher who wants to ensure external validity. In this context, the researcher should provide the necessary detailed information about all the stages of work and convince the reader (Baltacı, 2019). In this direction, all stages of the research process have been attempted to be given in detail. Obtaining the same results when the research is conducted again shows reliability. Reliability, which is one of the prerequisites of credibility, is a condition that must be met in research. In this respect, the reliability of the research is

1. Invariance (continuity) with respect to time
2. Cohesion between independent experts and raters (rater consistency) is determined with.

Reliability is evaluated in two parts: internal reliability and external reliability. External reliability can be defined as obtaining similar results to the study performed when the study is repeated in similar environments. To ensure external reliability, the study should be reported according to objective criteria, and data sources and participants should be specified in detail. In addition, the researcher should clearly state the facts, events, and theories that constitute the source of work in the research report. In the Methods section, how the data are analyzed, the data collection process, and the data collection tools are explained in detail, contributing to external reliability (Baltacı, 2019). In this context, the details of the study have been added to the sections mentioned. Internal reliability, on the other hand, is expressed as different researchers reaching similar results using the same dataset. Including more than one researcher in the research, confirming the accuracy of the interviews of the participants and experts, using the analyses of other experts and researchers in the analysis of the data obtained, and cross-coding with different encoders are of great importance in determining the internal reliability (Creswell, 2017). In line with this approach, it has been ensured that there are no obvious mistakes such as bias or missing parts that are not suitable for the theme during the

analysis of the answers given, that there is no deviation in the definition of the codes during the coding process, and that there is no change in meaning. Codes the expert, who has completed a doctorate in the field of social sciences, was first given sufficient information on OHS, and sample codes were created. Afterwards, it was ensured that the coding required for the research was performed separately by two experts. Comparisons were made by gathering data in the two specified date ranges, and the final codes were formed as a result of the cross-checks. For reliability, Miles and Huberman reliability percentage was calculated.

According to the coding control, which provides internal consistency, the consensus among coders is expected to be at least 80% (Miles & Huberman, 1994; Patton, 2002, as cited in Arastaman et al., 2018). In light of this information, the two coders met on certain dates, and the reliability percentages were calculated. In the first meeting, 26 codes with consensus remained the same, 14 codes were revised, and 74% of the codes related to inter-expert agreement were decided. In the second meeting, 32 codes with which consensus was reached remained the same, 3 codes were revised, and 92% of the codes related to inter-expert agreement were decided. 90% and above is an acceptable value for Miles and Huberman (Miles & Huberman, 1994; Patton, 2002, as cited in Arastaman et al., 2018). Cohen's kappa (k) coefficient is another technique used for reliability. The Kappa coefficient shows the proportion of the other compromises after the luck factored ones are excluded from the compromises. This statistical value takes a value between 0 and 1, and it is stated that values of .40 and above show acceptable reconciliation power (Wynd et al., 2003, as cited in Arastaman et al., 2018). Both Miles, Huberman percent reliability and Cohen's kappa (k) coefficient are not recommended by Shenton (2004), Lincoln and Guba (1988), Guba (1981) as they are more in line with the nature of the rigor concept of approaches (Arastaman et al., 2018).

Kappa coefficient analysis was performed to measure agreement between two observers. According to the results of this analysis, the two coders are significantly compatible ($K=721$; $p < .05$). Kappa statistical values are given in Table 1

Table 1.

Kappa Statistics Value

Kappa		.721
Comparison of	<i>SD</i>	.99
	<i>p</i>	.000

$p < .05$

In addition, to protect the identities of the school administrators participating in the research, coding was made as E1, E2, ... for male participants and K1, K2, ... for female participants. The obtained data were analyzed using the "content analysis method". This analysis method is used to determine the meanings and similarities in the data obtained from the observations and interviews, as well as to reveal the truths hidden in the data (Akbulut, 2021). In this direction, the research data were examined, coding was performed with the help of the NVIVO program, and categories were created by paying attention to the similarities and differences.

Ethical Permits of Research:

In this study, all the rules specified to be followed within the scope of "Higher Education Institutions Scientific Research and Publication Ethics Directive" were complied with. None of the actions specified under the heading "Actions Contrary to Scientific Research and Publication Ethics", which is the second part of the directive, have been taken.

Ethics Committee Permission Information:

Name of the committee that made the ethical evaluation = Kırşehir Ahi Evran University Social and Humanities Scientific Research and Publication Ethics Committee

Date of ethical review decision= 25.03.2022

Ethics evaluation document publication number= 2022/03/45

Findings

Open-ended questions were asked to the school administrators who participated in the research about their views on the OHS practices they perform at school, the problems they encounter in the practices, the deficiencies, and the perceptions of the school stakeholders on the OHS practices. In this context, the findings related to the answers provided by the school administrators are presented in the form of tables and figures below.

Theme, Category and Codes Determined by The Data Collection Tool

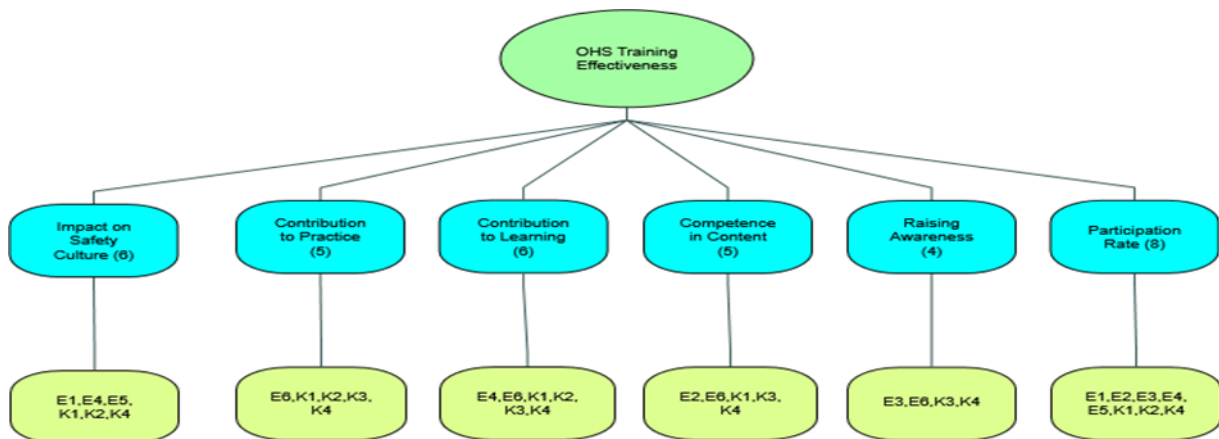
The views of school administrators about OHS practices carried out in schools were analyzed in the NVIVO program, and all the themes, categories, and codes were shown.

OHS Training Effectiveness

The categories and codes obtained under this heading, where the opinions of school administrators about the effectiveness of the OHS trainings given in their ability to manage the OHS practices they manage in their schools more effectively, are shown in Figure 1.

Figure 1.

Training Effectiveness Category and Codes



In this context, the statements of E2, E4, and E5 are given below.

I attend every training session and I think it is effective (E2).

I attend training. It helps us to ensure life safety within the framework of OHS practices, to perform the education and training process in schools at a more reliable stage, and to guide student teachers and employees in this direction (E4).

It enables me to gain a new awareness in terms of life safety and make it my priority every time (E5).

Negative approaches of school administrators for OHS trainings given: In particular, the trainings are made as a legal obligation, the people who give the training are not competent, the presentations are not supported with visual content, and the applications are given less place. E3, E6, K1, and K3 expressed this situation as follows:

I generally do not participate in OHS practices and training related to practice because I do not think it is very effective. I see it as a waste of time because it only progresses as a legal obligation and those who give the training do not have control over the event (E3).

I do not think that the training provided is effective enough. However, I think that if the training is done practically and the trainers are more competent in OHS, the goal will be closer (E6).

Superficial information is provided. I do not think that it is very useful because it is a short-term training. I believe that if more practical training is provided, its effectiveness will increase (K1).

I attend the trainings, but I do not think it is effective. I believe it will be effective if the intended information and visual content are too much (K3).

In the evaluations made for the OHS trainings given by the provincial and district national education directorates, it was stated that the OHS trainings provided did not provide sufficient effect in creating the necessary sensitivity in cases of risk and danger:

I am trying to participate in OHS practices in schools and in training related to practice. I do not think that life safety will be fully ensured with the content of the trainings given within the framework of OHS practices. For the education and training process in schools to occur at a more reliable stage, more comprehensive evaluations can be made and the OHS education content and rules can be arranged within this framework (E4).

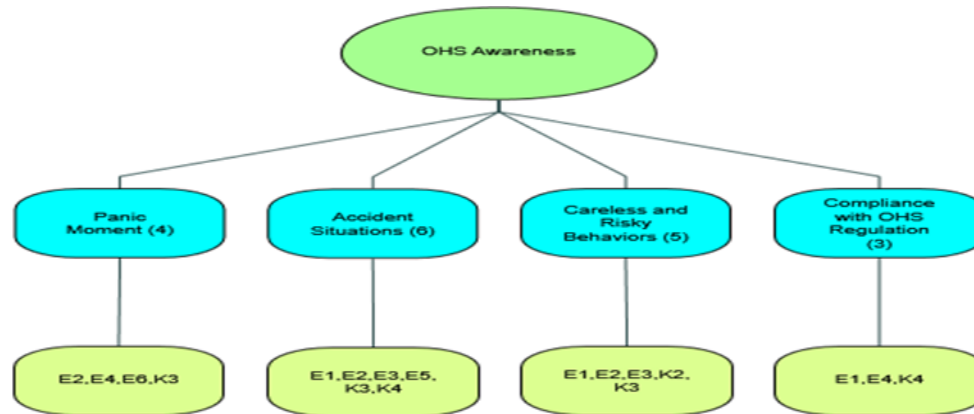
Some negative criticisms of school administrators on the OHS trainings were related to the training dates and times. It has been stated that the planned hours for OHS training, outside of working hours, reduce participation, which negatively affects the importance given to OHS training. K4's view on this situation is as follows:

... unfortunately, the importance and attention of school administrators toward the subject decreases when the trainings that should be done during working hours are carried out after working hours. The deficiencies seen in the mentioned practices in education impact the perspective of the subject even more negatively (K4).

OHS Awareness

In this section, the opinions of school administrators on OHS awareness are explained, and the categories and codes obtained are shown in Figure 2.

Figure 2.
OHS Awareness Categories and Codes



In the examination conducted on 'OHS awareness', one of the categories of the effectiveness of OHS practices, the majority of school principals think that the awareness effect is sufficient.

E1, E5, E6, and K2 stated that it was observed that the awareness increased the panic environment experienced during the accident and gave way to more controlled and precautionary behaviors as follows:

While acting carelessly in accidents and incidents before OHS practices, all processes before and after the accident are more controlled with this awareness created by OHS practices. ... (E1).

Awareness and the creation of awareness prevented panic during and after the accident. The accident situation was resolved with colder blood (E2).

... I naturally think that it will have improved awareness compared with the past (E5).

I believe that every training and application is always better than the old one in terms of awareness; naturally, this situation affects the accident moment and before it positively (E6).

Awareness occurs after each training session (K2).

In the comments made in line with the level of awareness of E3 and K1 OHS practices, it was stated that teachers' awareness improved, but there was not much change in students' awareness. School principals stated that more time should be allocated to the students to raise awareness, that there should be more visual content, and that the trainings given by experts should be given with teaching techniques suitable for the level of the student.

OHS practices naturally create an interest, and it is seen that the level of awareness, especially in teachers, increases, but this is not seen much in students. I think there is not much change in general (E3).

Teachers have a high level of awareness. More training should be provided to students. Training given by real experts and suitable for children will be effective. Only the presentation method should not be used in the trainings; it should be demonstrated and applied (K1).

E4' stated that the question marks that formed in the minds of the students before the OHS practices were erased after the practices, and their awareness level was higher about how they would act in times of danger. In addition, E4' stated that the prejudices of the teachers continued, and therefore there was not much change.

Before the OHS applications, the questions that had question marks in the minds of the students were removed with the awareness created by the OHS applications. For teachers, the situation continued in the same way as before and after... (E4).

K2 stated that it is natural to increase awareness within the framework of the practices, and that awareness has partially increased, but there is not much change in injury rates.

Although the approach has changed partially in cases related to accidents, injuries continue (K2).

K3 stated that there was no change after the OHS practices and that parents should also participate in the process, especially in raising the awareness of students as follows:

I do not think that the awareness is high, the support of the family is necessary for the awareness to be at the desired level (K3).

E2 stated that protection from accident and risk factors is ensured thanks to the teachers who are experienced and have more knowledge of the situation, rather than the OHS practices, and that OHS practices are generally on paper.

There were no serious accidents in our school due to the profession, seniority, and attention of the teachers, rather than the effect of the OHS practices. Compared with the past, there is a decrease in simple accidents, but it can be said that OHS applications should not remain on paper to be more effective (E2).

OHS Material Effectiveness

In this section, the opinions of school administrators on OHS material effectiveness are explained, and the categories and codes obtained are shown in Figure 3.

Figure 3.

OHS Material Effectiveness Category and Codes



In the evaluations made by school administrators, the category of "OHS Material Effectiveness" is divided into three subcategories: "Visual Material Understandability", "Visual Material Effectiveness" and "OHS Material Use Adequacy".

In the evaluations of the school administrators about the 'Visual Material Understanding'; they are generally understandable by E1, E2, E3, E4, E6, K1, K2, and K4 as follows:

Its intelligibility is seen as sufficient because the feedback received by the students is positive (E1).

understandable and appropriate to the learning level of the students (E2).

Especially the posters are interesting and understandable...(E3).

...intelligibility is sufficient. Images express themselves in accordance with their intended purpose (E4).

...it is understandable...(E6).

It attracts the attention of children and employees and provides sufficient information about what to do (K1).

Visual materials convey the desired message about the importance of OHS practices. Therefore, its intelligibility is sufficient (K2).

... The works prepared by teachers and students are understandable (K4).

In the 'Visual Material Understandability' sub-category, E5 and K3 stated that visual OHS materials, which are designed in accordance with the desired purpose and increase their attractiveness, will contribute more to the intelligibility as follows:

I can't say that it attracted much attention, but it seems that the visuals were designed in accordance with the desired purpose, so it is understandable (E5).

Visual materials can be developed further, especially if they are designed by students according to their age levels, they can attract more attention, so if they are developed again considering the age for the purpose, their effectiveness as well as intelligibility (K3) can be ensured.

According to the comments made by school administrators belonging to the sub-category called 'Visual Material Effectiveness'; the view that the materials are not effective is more dominant. This situation was expressed by E3, E4, E5, and E6 as follows:

... I cannot say the same about material effectiveness because especially the OHS measures taken are not approached very sensitively (E3).

I do not think its effectiveness is excellent. I wouldn't say it's completely bad either (E4).

... I can't say it's effective (E5).

I don't think it is effective; it should be changed frequently with different images to be more effective (E6).

Visual materials can be developed further, especially if they are designed by students according to their age levels, they can attract more attention, so if they are developed again considering the age for the purpose, their effectiveness can be ensured as well as intelligibility (K3).

School administrators emphasized that visual materials are interesting and effective in accident and risk factors by E1, K1, and K4 as follows:

I do not think it is as effective as its intelligibility (E1).

The materials prepared for OHS are sufficient and effective (K1).

I think it is effective (K4).

E2, K1, and K3 emphasized that the materials are effective, that they should be arranged according to the student age group to be more effective, and that their attractiveness should be increased:

I think it is effective, I think it will be even better if it is revised according to student age levels in schools (E2).

It attracts the attention of children and employees and provides sufficient information about what to do (K1).

Visual materials can be developed further, especially if they are designed by students according to their age levels, they can attract more attention, so if they are developed again considering the age for the purpose, their effectiveness can be ensured as well as intelligibility (K3).

K2, one of the school administrators, stated that the effectiveness of the visual material was not complete, and no visible effect was observed when compared with the previous one.

Its effectiveness is moderate because some injuries are caused by non-compliance with OHS rules (K2).

Considering the comments made for 'OHS Material Use Adequacy', which is stated as the third subcategory related to OHS material effectiveness, it has been stated that, especially since the competence levels of the teachers are good, their proficiency in using OHS tools is also good. However, E1, E3, E4, E6, and K3 expressed that especially high school students cannot use OHS tools and equipment because their competence in using OHS materials is not yet at the desired level:

As the management and teaching staff, we use the tools related to OHS at a sufficient level (E1).

Because of their level of awareness, our teachers use OHS-related tools and equipment adequately. I do not think that our students have the required qualifications because they are not given adequate training on the introduction and use of OHS tools (E3).

As management and teaching staff, we use OHS-related tools and equipment adequately. I believe that this sensitivity can be increased by conducting awareness studies about the use of relevant tools for the safety of our students and ourselves (E4).

Of course, it would be a little wrong to expect such a thing from students, but in parallel with the effectiveness of the trainings, teachers are considered sufficient in the use and application of OHS equipment, and age is important (E6).

When adequate promotion is made, there is no problem in its use, but the students have deficiencies in this regard because of their age, and they have problems in their use (K3).

School administrators produce solutions to increase the effectiveness of the use of OHS equipment. E1, E2, E4, and K1 are of the opinion that approaches such as introducing and demonstrating OHS equipment in training given by experts in this field and preparing slides emphasizing the importance of using equipment will increase the proficiency in the use of materials.

The use of the relevant tools and equipment for our students is not at the desired level, and this sensitivity can be increased by conducting awareness studies by the experts assigned by the Ministry of National Education (E1).

... practical training will solve this problem (E2).

I believe that this sensitivity can be increased by conducting awareness studies about the use of relevant tools for the safety of our students and ourselves (E4).

More full presentations and trainings should be made by people who are better equipped about their necessity (K1).

E2, E5, K1, and K2 did not have a positive approach to the adequacy of material use in the OHS practices managed in schools and offered suggestions regarding the necessity of eliminating the deficiencies within the MoNE.

I do not think that the competencies are sufficiently developed, but practical training will solve this problem (E2).

No studies have been conducted on the use of OHS equipment. This is because the Ministry of National Education does not direct experts on the subject. Naturally, the use of tools is not at a sufficient level (E5).

Managers and teachers are not competent in using OHS tools. More training is needed. Superficial training turns OHS practices into an ordinary business situation (K1).

Mastery of the use of tools and equipment is not at a sufficient level due to the lack of training and detailed practical explanations and the inability to allocate sufficient time (K2).

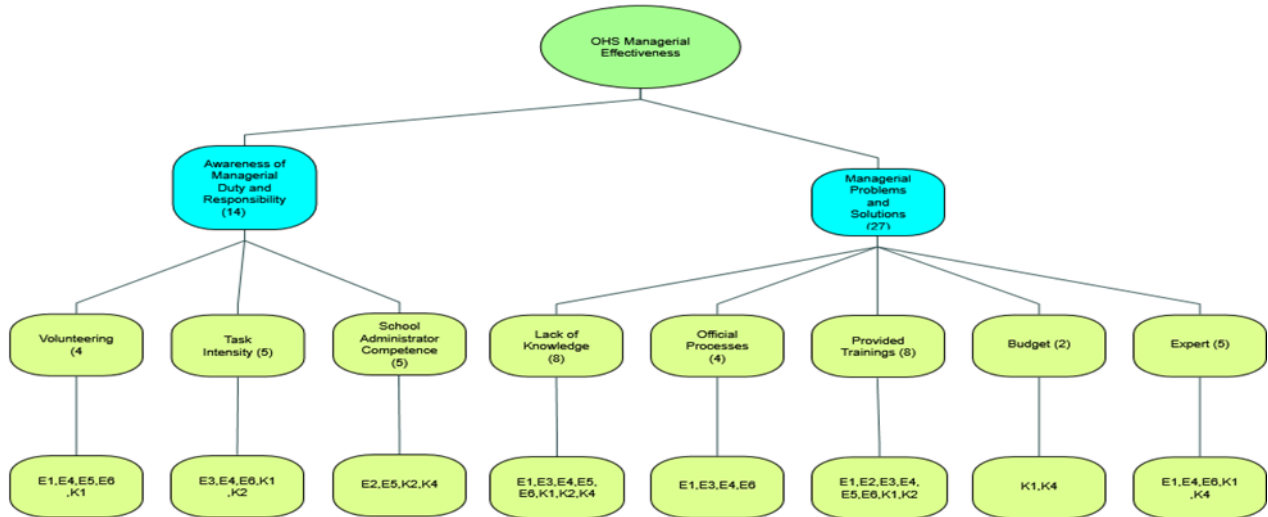
K3 stated that by presenting a different perspective on material use proficiency, they especially increased teachers' awareness of the use of OHS equipment and contributed to the use of equipment in class or extracurricular times, as follows.

Vocational teachers at our school inform their students about OHS equipment in the professional development course. This improves competence in the use of tools. Although not all the teachers are sufficient in the use of tools, we are trying to provide the necessary training (K4).

OHS Managerial Effectiveness

In this section, where school administrators' views on OHS managerial effectiveness are explained, the categories and codes obtained are shown in Figure 4.

Figure 4.
OHS Managerial Effectiveness Category and Codes



The two subcategories determined as 'Managerial Duty and Responsibility Awareness' and 'Managerial Problems and Solutions' are shown in Figure 4.

Responsibility' subcategory, it was stated that the OHS duty and responsibility awareness of school administrators was insufficient. However, it is seen that E2, E6, and K2' give a more positive opinion for this subcategory.

Although the law obliges school administrators, sufficient awareness is created as volunteering is prioritized in their duty regions (E2).

Since the school administrators are the first to be responsible in accordance with the regulation, they have to be related by necessity (E6).

School administrators are aware of their OHS duties and responsibilities and perform their duties as best they can (K2).

E3 and E4 stated that school administrators are aware of their duties and responsibilities, but the studies have not reached the desired level. In addition, they stated that they had to take responsibility for the injuries that may occur because of all kinds of accidents that may occur in the school, and this situation put the school principals under stress.

OHS practices managed by school administrators have taken precedence over their main job of education and training. Being seen as the cause of accidents that may occur at school stresses school administrators a lot, so their awareness is high but not sufficient (E3).

Of course, my school administrator friends are aware of their OHS responsibilities, but sometimes they turn into situations that cannot be overcome because of too many responsibilities (E4).

E1, E4, K1, K3, and K4 stated that the level of consciousness was not sufficient. The reason for this is that school administrators have stated reasons such as the burden of duty arising from education is high, the laws and obligations are not known well enough, and the training given by the Ministry of National Education is not given by competent people:

Although school administrators have many duties and responsibilities, OHS practices should be conducted with OHS experts to be allocated to institutions. I do not think that school administrators perform this task at the desired level (E1).

When the problems of teachers and students regarding the duties and responsibilities of the school administration with education are added, the intensity increases. When the heavier burden of OHS applications is added to this situation, the situation becomes quite difficult (E4).

Too many responsibilities are placed on school administrators regarding OHS. A budget is needed to take some measures, but unfortunately, such a budget is not given to schools. Most school administrators are not aware of their responsibilities. The situation is progressing only as a legal obligation (K1).

In general, I do not think that our colleagues have this responsibility at the desired level; unfortunately, most of them are not aware of this heavy burden (K3).

The applications made by the Ministry are insufficient to understand the importance of the subject. Therefore, I think that school administrators are not sufficiently aware of their OHS duties and responsibilities (K4).

E5, it was stated that OHS-related approaches are taken more seriously in natural disasters such as epidemics, and this positively contributes to the increase of OHS duty awareness. However, it has been stated that when these processes are over and they return to normal again, there will be a decrease in the level of consciousness.

Because it is seen as a legal obligation, I think the seriousness of the situation was understood during the pandemic process. Even though the pandemic process shows how serious the event is, I think it will return to the same triviality when it's over (E5).

E1, E2, E4, E6, K1, and K4 from school administrators stated that there is a lack of information in the 'Managerial Problems Encountered and Solutions' category, which is the second sub-category of the 'OHS Managerial Effectiveness' category, and that the quality of the training given by the experts should be increased to overcome this deficiency. They also stated that the establishment of a more internalized system regarding OHS laws and regulations would be effective, and the provision of competent experts by independent institutions would increase the quality of OHS practices.

In general, I encounter problems with carelessness in OHS practices and lack of knowledge about the official process of the work. In-service training and adequate delivery of the procedures of the situation by actual experts will help to solve the problems (E1).

The biggest problem is that the organizations providing OHS services are not independent. In other words, receiving services from independent OHS organizations for the

training and practices provided will lead to more sensitive progress on the subject and the problems will be resolved faster (E2).

In general, problems of carelessness and lack of information about the official process of work are encountered in OHS practices. Sufficient and remarkable in-service training will help solve problems and increase efficiency (E4).

In this regard, the risk analyses required by the legislation, especially by the business experts, and taking the measures in line with these analyses will contribute greatly to the problem (E6).

We also have the problem of a lack of information. In my opinion, school administrators should be informed about their duties and responsibilities, and they should receive training and work with people who have OHS expertise in this regard (K1).

In addition, the ministry can conduct more comprehensive and coordinated studies by increasing the number of OHS experts (K4).

K1 and K4 It was stated that the necessary financial resources should be provided to perform the studies more professionally and that these resources should be supported by additional budgets, not from the school budget. In addition to the purchase of the necessary services, this approach also includes missing equipment, physical changes of the school, etc. It has been stated that it will help in ensuring that it is used in expenditures such as.

The biggest problem is the budget problem in the measures to be taken for OHS (K1).

However, there are serious problems in eliminating other deficiencies in schools that are insufficient in terms of cost. The Ministry can overcome these problems by creating appropriations on the basis of schools (K4).

School administrators stated that not giving the necessary importance to OHS practices that prevent danger and risk situations that may cause loss of life and property and the lack of sensitivity on this issue create a big problem in OHS management. In solving this problem, the necessity of removing the training from the circle of monotony and giving them hands-on training by experts, using mobile applications, taking the lead in OHS management with the guidance of risk analyzes prepared by experts, and using all necessary approaches to eliminate perception deficiencies were expressed by E5, E6, and K3 as follows.

Conducting training in the form of seminars causes the work to be considered boring, monotonous, and a waste of time. They should be supported by mobile applications (E5).

... so no matter how sensitive you are about it, it comes out of an open place. Especially by business experts, the risk analyses required by the legislation and taking precautions in line with these analyses will contribute greatly to the problem (E6).

I think that people have great deficiencies in their sensitivity to situations, which causes great problems in practice. Therefore, first, the necessary work should be done to increase the perception of people on the subject. Training should focus on this situation (K3).

The comments made indicate that one of the major problems that school administrators encounter while performing OHS practices is the inability to allocate the

necessary time for OHS practices due to the excessive intensity of the education and training process. It was stated that this situation caused great divisions, and that most efforts to prevent risk and danger situations that should be done in accordance with the regulation were overlooked. Among those presented as a solution, the most important suggestion was that the execution of OHS practices should be carried out by experts, and that if the execution was to remain with the school administration, the responsibility should be shared. The opinions of E1, E3, E4, and K1 on the subject are as follows.

Although school administrators have many duties and responsibilities, OHS practices should be conducted with OHS experts to be allocated to institutions (E1).

Being seen as the cause of accidents that may occur outside legal responsibility in a situation where the OHS practices managed by school administrators come before their main job, education and training, puts school administrators under stress (E3).

When the problems of teachers and students regarding the duties and responsibilities of the school administration with education are added, the intensity increases. When the heavier burden of OHS practices is added to this situation, the situation becomes quite difficult. Of course, my school administrator friends are aware of their OHS responsibilities, but due to the reasons listed above, they sometimes turn into situations that cannot be overcome. As for how to solve this problem, conducting it with OHS experts to be allocated to institutions will ensure that the situation will be conducted more disciplined (E4).

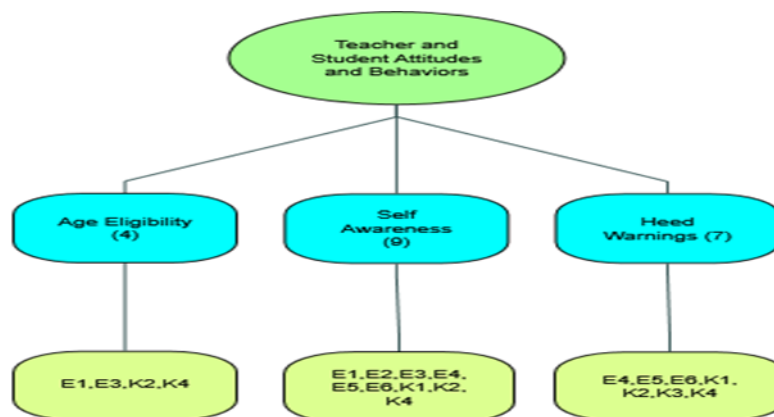
Too much responsibility is placed on school administrators on OHS (K1).

Teacher and Student OHS Attitudes and Behaviors

The categories and codes obtained in line with the opinions of school administrators regarding teacher and student attitudes and behaviors are shown in Figure 5.

Figure 5.

Teacher and Student OHS Attitudes and Behaviors Categories and Codes



This situation is expressed by E1, E3, E4, E5, K2, and K3 as follows:

Most of the time, our teachers fully comply with the OHS practices because they are more sensitive in consciousness and are more aware of the seriousness of the event, whereas the students know the importance of the practices but do not pay much attention to them (E1).

Most of the time, our teachers show the desired sensitivity to OHS practices and fully comply with the instructions, whereas students do not consider OHS practices due to their age, even if they are aware of them (E3).

Most of the time, our teachers comply with OHS practices... (E4).

Even though students are aware of OHS practices, they do not take it into account too much (E4).

... reflects OHS practices in their attitudes and behaviors at a sufficient level (E5).

As much as they can, our teachers develop positive attitudes and behaviors toward OHS practices and follow the rules. Although the awareness of the students increases due to the attractiveness of the applications, they cannot fully reflect the OHS practices in their attitudes and behaviors due to their age (K2).

When the application rules are explained in detail and clearly, the teachers understand the situation and develop more sensitive attitudes. However, I do not think that students will develop attitudes and behaviors at the desired level because of their age (K3).

In particular, E2 and E1 stated that the sensitivity of both groups to OHS practices varies according to the person, age, experience, and education level, and therefore cannot be the same for everyone; therefore, attitudes and behaviors differ from person to person.

The same sensitivity does not occur in every staff member and student. Therefore, attitudes and behaviors generally progress toward the person (E2).

It is seen that teachers and students are willing to participate in OHS practices; however, I cannot give clear information about whether this affects their attitudes and behaviors (K1).

E4 and K1 stated that the positive attitudes of teachers toward the behaviors they normally show in line with OHS practices change negatively during exam and activity periods when the workload increases, and they do not exhibit the desired behaviors. In addition, they stated that deficiencies in OHS training practices and high difficulty levels of OHS practices cause behavioral deficiencies.

Most of the time, our teachers comply with OHS practices, but I think that the sensitivity to the necessary accident risk situations decreases, especially during exam and activity returns (E4).

... however, OHS practices can be ignored because they are difficult to perform in practice (K1).

E5 stated that school teachers reflect what they already know about OHS practices on their behaviors, and that they cannot comment much on students' behaviors, but how much what is learned is reflected in behaviors in case of accidents can be observed:

Some teachers think of such practices as things they already know and reflect them on their attitudes and behaviors at a sufficient level. They have high interest because it is new

and attractive to students, but is it reflected in their attitudes and behaviors? I cannot say anything for sure without seeing it at the time of the accident (E5).

Expressing that the situation is negative for both groups in his comment, E6 expressed his views on the importance of OHS practices in epidemics and stated that the efforts to prevent accidents and risk factors will help protect against all loss of life and property, especially natural disasters:

They are not aware of the situation yet, but the pandemic period that has emerged recently has shown what will happen if the necessary sensitivity is not the case (E6).

K4 stated that both groups managed to avoid being harmed by emergency, danger, and risk factors with the experience and practices they gained through school club activities. Their readiness levels improved thanks to these trainings and positive attitudes were formed:

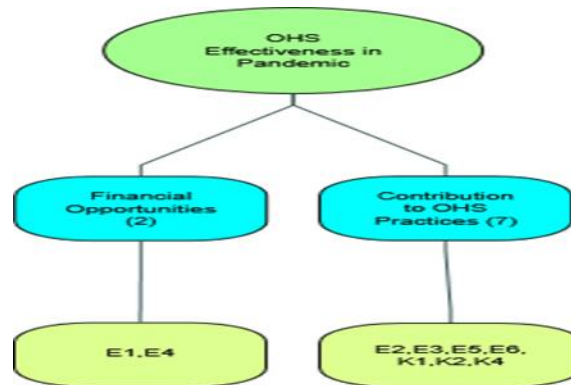
In addition to the OHS practices, first aid training, natural disaster and fire drills, evacuation, protection, and rescue practices in line with the work of the civil defense club have positively affected the attitudes and behaviors of both teachers and students (K4).

OHS Effectiveness in a Pandemic

Considering the effectiveness of OHS in the pandemic, the school administration has the category and codes form shown in Figure 6.

Figure 6.

Pandemic Period OHS Effectiveness Categories and Codes



Considering the general answers in this category, it is seen that the practices during the pandemic period positively affect all processes related to OHS. It has been stated that especially health-related OHS studies are at the forefront, school stakeholders are more sensitive about hygiene-related measures, and risky situation measures are applied sensitively by school stakeholders. This situation is expressed by E1, E2, E3, E4, E5, E6, K1, K2, and K4 as follows:

In the pandemic process, OHS applications, especially those related to health, have been seen as more important... (E1).

They provided support and guidance regarding the pandemic measures and preparations to be taken. OHS hygiene practices, which were not given much importance before, gained great importance especially in this period (E2).

This troublesome process emphasized the importance of OHS practices. For example, students without the habit of washing their hands now wash their hands after everything they touch. Many more sensitivities like this started to form throughout the school (E3).

To increase the awareness of OHS in the pandemic process positively... (E4).

In particular, awareness about health has increased and the severity of the situation has been seen more clearly. Occupational health has become more significant in this respect. All school staff and students started to be more careful about virus-related measures, naturally, especially hygiene measures were taken spontaneously (E5).

The pandemic spread quickly and education stopped completely, especially in the absence of hygiene-related measures (E6).

In this process, more attention was paid to OHS practices. Studies were conducted more carefully, both as management and as implementing personnel. In particular, with the 'My School is Clean' certification process, many measures have been taken and the applications continue (K1).

Gained more sensitivity, increased general awareness on precautions, improved hygiene measures more, and naturally enabled the measures to be taken within the scope of OHS to turn into behavior in a shorter time (K2).

The pandemic process has improved the sensitivity of OHS practices, especially in terms of cleaning, hygiene, and mask use. OHS rules were provided without any warning (K4).

While talking about the sensitivity of the OHS hygiene measures applied during the pandemic process, school administrators especially mentioned the lack of financial opportunities, emphasizing that the importance of these deficiencies in the process is very great, and it was stated that the ministry should allocate a special budget for this situation. E1 and E4 express the situation as follows:

... OHS practices that need to be performed to protect against the virus were blocked due to financial insufficiency. Because these applications can be carried out easily within the financial possibilities, the provision of appropriation support by our ministry will relieve the situation (E1).

OHS practices have been prevented from being fully implemented due to a lack of financial means. Because these applications can be carried out easily within the financial possibilities, appropriation support should be provided by our ministry during the pandemic process (E4).

K2, one of the school administrators, stated that the positive effects of the pandemic period were not observed, there was no change in the sensitivity of school stakeholders to OHS, and the mistakes made in previous accidents and risk situations continued.

I do not think that the pandemic process has any effect on OHS practices. As in previous processes, sufficient sensitivity was not provided in the case of accidents and risks (K2).

Discussion and Conclusion

According to the opinions of school administrators regarding OHS practices carried out in schools, school OHS performance indicators include OHS Education Effectiveness, OHS Awareness, OHS Material Effectiveness, OHS Managerial Effectiveness, Teacher and Student OHS Attitudes and Behaviors, and OHS Effectiveness in Pandemic.

The opinions of school principals regarding the OHS Training Effectiveness category were examined, and the general opinions were evaluated as the ineffectiveness of OHS training. The potential for damage or harm by affecting the employees or the organization, existing in the working environment or coming from outside, is called "hazard" and the possibility of injury, loss, or other harmful consequences arising from these hazards is called "risk". To be protected from dangers and risks in the organizational environment, OHS training should be given to the employees of the organization (Akpınar & Öğütoğulları, 2016). In the evaluations made, in the comments made that the school administrators did not find the implemented OHS trainings effective enough and "What can be done to make it effective"; the necessity of determining the needs and conducting trainings in this direction was emphasized. In parallel with the approach of Akpınar and Öğütoğulları (2016), a needs questionnaire should be administered to employees by an OHS specialist or a workplace physician before training programs are created. In this way, the duration and type of education should be revealed. It should be ensured that the continuity of OHS trainings of school administrators and which trainings will be provided in the future should be determined, and the quality of OHS education should be increased. In this direction, according to Kılış and Demir (2012), the subject and type of OHS training should be determined and a training program showing the OHS training to be implemented in the current year should be prepared. In this training program, there should be information about the purpose, subject, date, target, duration of the trainings to be given, the title, name, surname of the trainees, and the number of those who will attend the training. It will be of great benefit to perform training activities within a program in terms of ensuring the continuity of the trainings given, determining which trainings are given before and which trainings can be provided for the following periods. It has been determined that the comments made by school administrators about the improvement of OHS training are especially in line with the delivery of training by competent people. In parallel with this approach, according to Akpınar and Öğütoğulları (2016), professionals with certain competencies are needed to implement training programs. These professionals should be occupational safety specialists, field specialists, workplace physicians, supervisors, coordinators, or employees who have received training in this field.

In the same direction, Çay (2019) on OHS practices in schools talked about the importance of OHS training given in schools and emphasized that there are deficiencies in their effectiveness. Likewise, Taşdemir and Gür (2021) examined the findings regarding the OHS training program and stated that teachers opinions on OHS training programs were positive, but they reported negative opinions about the shortness of the training period and the lack of materials and practices. The OHS trainings conducted in schools have a great impact on the OHS attitudes and behaviors of school stakeholders. In particular, it is seen that school administrators should take measures to ensure that the visual contents are included in the

management of the OHS education process, as well as case studies and practical explanations. Yılmaz (2009), one of the OHS studies conducted on organizations outside the school, emphasized that OHS trainings are essential in his research and stated that these trainings are insufficient and therefore the effectiveness of OHS is reduced. In addition, he stated that a systematic approach is needed for OHS training. Apart from the contribution of OHS trainings to OHS practices, there is also the effect of increasing safety awareness. In particular, Dursun (2014) investigated the relationship between safety awareness and OHS behaviors in work environments and determined that OHS training is of great importance in improving safety awareness. In addition, it has been stated that the importance of occupational safety and safe behavior should be emphasized at all stages of training to eliminate deficiencies in the current situation. It is stated that OHS training contributes to the development of OHS culture in the working environment as well as to the benefits related to safe behavior and OHS awareness. Bilir (2016) stated that the importance of OHS training in creating an OHS culture and increasing the level of accident and risk factor awareness in our country is great, but he stated that this situation is not at sufficient levels. In addition, it has been determined that many work accidents occur every year because of mistakes caused by a lack of education; therefore, there are inadequacies in the effectiveness of education. In general, it was emphasized that the OHS trainings were either not done or incomplete, that the OHS trainings did not contribute to the prevention of accidents and risk factors in the working environment, and that the OHS practices could not serve their main purpose. Yılmaz (2009), stated that the most important OHS-related issue in Türkiye is OHS training, but the necessary importance is not shown. It is thought that the emphasis on the effectiveness of OHS training will be beneficial in eliminating the deficiencies of OHS training. The findings revealed that while focusing on the results of OHS training deficiencies, the management level or employer representatives who took part in the delivery and execution of these trainings were not mentioned much. It also showed that there is no guiding study for OHS education content or for school administrators. It is thought that this study will be a guide in eliminating the deficiencies arising from this situation.

Regarding OHS awareness, school principals stated that the awareness of school stakeholders on the subject was sufficient and that the practices carried out improved the awareness level of teachers. The concept used to show the level of awareness of people's own behavior and attitude is expressed as awareness (Kağıtçıbaşı, 2010). Security awareness is defined as the mentality that determines the judgments, perceptions, and awareness of employees regarding their individual abilities and responsibilities to protect themselves from the risks that will lead to a dangerous situation in the work environment. Studies have shown that safety awareness has an impact on OHS-related behaviors (Dursun, 2014). In line with the comments made by school administrators about OHS awareness, it was observed that teachers' safety awareness increased depending on seniority and year. In this direction, it has been determined that young teachers do not have sufficient sensitivity at the point of OHS application, so the desired safe behaviors are not observed in the risk situations experienced. In addition, according to Dursun and Keser (2014), the safety awareness of the employees in the organization is an effective factor in occupational safety behaviors, and as the safety awareness of the employees increases, they participate more in safety-related issues. Therefore, the activities and arrangements that increase the safety awareness of employees are

of great importance in reducing occupational accidents. For this purpose, the security mission, slogans, material publications (library, statistics, bulletins), logos, effective use of media tools, effective OHS trainings, and OHS culture will make a significant difference in the development of safety awareness (Dursun & Keser, 2014). In general, the situation seen in the research on the awareness of OHS practices is that the OHS awareness of the employees and managers of the organization increases. The most important reason why the findings are in this direction is that the obligations of OHS Law No. 6331 cover all public institutions as well as the private sector. This situation has led to an increase in scientific studies on OHS practices, and each study has contributed to the development of awareness of OHS practices in all institutions, especially in public and private schools. In addition, Bilir's (2016) study on OHS awareness in Türkiye parallels the conclusion that OHS awareness has increased significantly in recent years.

In the evaluations made by the school administrators regarding the "OHS Material Effectiveness" category, it was determined that "visual materials are understandable and their intelligibility should be improved" for the sub-category of the clarity of visual materials. Evaluations of this subcategory indicate that the material is well understood. In the sub-category of "Visual material effectiveness", school administrators stated that visual materials are effective and that "the effectiveness of visual materials can be improved and visual materials are not effective". The dominant view is that visual materials are not effective. Teaching that appeals to the sense organs will ensure that what is learned is more permanent if it is supported by technologies (Erdemir & Bakırcı, 2016). Therefore, the preparation of visual materials according to the purpose and characteristics of the target audience will increase effectiveness. In particular, in the visual perception process, the quality of the content intended to create the perception, as well as the creation of an effective message system and a successful message system, increase the effectiveness of the visual design. In this direction, while creating the design, it is necessary to create design contents suitable for the different target audience qualities and expectations encountered in the perception process. These designs help to achieve the desired results in line with the effective visual perception process, to receive effective feedback, and to create an effective visual understanding. Determining the target audience characteristics related to visual perception as a center will contribute to solving the problems related to perception and enabling the buyer to use the design effectively (Erişti et al., 2013). In this context, determining the visual materials designed for school in OHS practices in accordance with the qualifications of students and teachers will increase the effectiveness of visual materials. In line with the evaluations of the school administrators, it was stated that the teachers were sufficient in the use of OHS tools and equipment (fire extinguisher, warning signs, safety strips, etc.), but the students were not sufficient at the desired level. To eliminate this negative situation, it is thought that teachers should undertake the task of safety coaching in the use of tools and equipment, since they are closer to the students. With the help of the obtained data, this method will help eliminate the problems in the use of missing OHS materials by teachers and students.

According to Kılış and Demir (2012), who reached similar results, using visual tools (working in newspapers or magazines, using posters with plenty of pictures, creating security boards) to ensure the continuity of the information obtained after OHS training increases the

effectiveness of OHS. According to many research findings, the use of materials increases learning success (Kaplan et al., 2013). In the studies, it can be stated that the increase in material intelligibility in OHS practices greatly increases the awareness of accidents and risk factors. In OHS practices in schools, it was emphasized that OHS awareness should be developed more in students than in administrators and teachers. The findings obtained in this study confirm this. The use of OHS visual materials in OHS trainings indirectly increases the effectiveness of OHS materials. Bayram's (2020) study, in which he investigated the quality of online OHS trainings, emphasized that the effectiveness of OHS trainings, supported by visual content and expressed in fluent narratives, which were constructed in an immersive way, would increase.

In the OHS managerial effectiveness category, the evaluations made by school administrators are expressed in subcategories of managerial duty and responsibility awareness, administrative problems, and solutions. In the evaluations made in these subcategories, it was seen that there was no sense of duty and responsibility. Management, systematic and scientific knowledge community; refers to an application and a set of activities or processes (Mucuk, 2008). In this context, the development of a sense of responsibility in management requires a systematic approach to the scientific processes of the subject being managed. Therefore, it is necessary for school administrators to receive adequate training on OHS practices. The efficiency and effectiveness of an organization depend on the degree to which it can achieve its goals. This can only be achieved through the harmonious operation of organizational elements (Genç, 2005). The harmony of teachers, students, and administrators in the school is of great importance in achieving the goals of managed OHS practices. It was emphasized that information, financial, legal, and time resources are of great importance in the approaches of school administrators, especially in the healthier progress of OHS practices. It is seen that the situation is in the same direction as in the studies on the subject. Koç and Topaloğlu (2010) stated that various resources are used during the management process, including human, financial, time, information, and legal resources. It has been emphasized that financial resources, which are the most emphasized resource, are not adequately provided by the MEB during OHS implementations, and these impossibilities create some inadequacies in eliminating some risks. The development of responsibility awareness among school administrators will positively affect the OHS culture in the school. It has been emphasized that a safety culture, which is defined as a product of the thought, value, competence, behavior, and perception models of groups and individuals in an organization, will be formed under the leadership of school administrators (Şensöğüt, 2018). Although OHS management in schools increases the duties and responsibilities imposed on school administrators, the most ideal education and training will be possible with the best managed OHS practices. Odaman stated that the material and moral losses that will occur due to the disruption of education will cause great harm to both the people and the country's economy. Employees are injured, disabled, or killed because of hazards arising from the work environment. Because the neglect of OHS practices greatly increases economic costs, this neglect interrupts the sustainable social and economic development that countries focus on the most (Serin & Çuhadar, 2015).

According to Çay (2019), while some administrators working in schools stated that OHS practices were correct and important, a significant portion of them stated that these practices

were only for show and that necessary studies should be conducted to change this situation. It has been seen that the opinions expressed about the other subcategory, managerial problems and solutions, are evaluated in the center of lack of information, lack of necessary financial resources, not giving the necessary importance, mandatory OHS practices, and high workload. It has been determined that the most expressed opinion among these subcategories is the lack of information and the opinion that the workload, which is close to this opinion, is too high. According to the study of Yılmaz (2009), who has similar findings, the activities related to OHS are carried out under adverse conditions such as training, information, coordination, and lack of experts on the subject. After private sector workplaces were included in the scope of OHS Law No. 6331, public institutions were also included in the scope of this law in 2012. With this law, public administrators had to undertake many legal responsibilities and obligations for which they did not have any knowledge or sufficient technical skills to apply (Akaner, 2022). The article of this law, which is seen as the heaviest of the obligations for managers, places the responsibility of performing the work and transactions related to OHS practices in the workplaces on the public administrators as the employer's representative. This situation can cause managers to have difficulties in determining legal priorities, especially in their work areas. In addition, the law on the employment of OHS professionals who conduct risk analyses to determine risk factors in the working environment is constantly postponed. This may cause managers without sufficient technical knowledge about risk analysis to feel inadequate in detecting situations that may cause security vulnerabilities. In addition, the high workload of school administrators regarding both education and OHS may cause a decrease in their awareness of taking responsibility for OHS practices. It is thought that it would be more beneficial to evaluate the findings of the research on the subject with these deficiencies.

The views on the category of teacher and student OHS attitudes and behaviors are that teachers' attitudes and behaviors can be positive or negative and change according to the individual (Dursun & Keser, 2014). In this respect, it is seen that the attitudes of school administrators toward OHS are positive, and this is reflected in their behaviors positively. It is significant, but not sufficient, that school administrators have good attitudes and behaviors toward OHS. Administrators need to reflect this on the school culture as well. Organizational culture has an important place in the dissemination of behaviors to the public. In particular, Nielsen (2014), it states that human behavior is closely related to culture, and in countries where the occupational safety culture is high, occupational accident rates are seen at very low levels. In this context, with the help of the attitudes reflected in the school safety culture, the behavior of school staff, teachers, and students will be developed in this direction, thus provide protection from OHS risk factors and dangerous situations.

Teachers' attitudes and behaviors need to be improved. For this reason, the duties, responsibilities, and OHS training that school administrators will give to teachers regarding OHS practices in schools will help teachers gain OHS awareness and contribute to the positive development of OHS attitudes and behaviors (Türüdü, 2019). It has been stated that the most important factors that determine and guide the safe behaviors of the employees are the thoughts, attitudes, behaviors, and perceptions of the organization management about OHS. It has been observed that with the increasing importance given by the management to OHS practices, the sensitivity of the employees to OHS regulation procedures, equipment use, and

training has also increased (Can & Hüseyinli, 2017). When the findings of the study are examined in this context, it is thought that the positive changes in the OHS attitudes and behaviors of teachers and students depend on the approaches of the school administration. According to the study of Öztürk (2020), which was carried out in schools where the management's OHS approaches are good, it was observed that vocational high school students with school management who aim to create a good OHS culture comply with the OHS rules. In addition, it has been observed that they have knowledge about OHS, and their attitudes and behaviors toward OHS practices have changed positively.

When we look at the opinions of school administrators about how epidemics, such as pandemics, affect the perspective on OHS practices, the general opinion is that the pandemic period positively affects the perspective on OHS practices. During the pandemic period, serious measures were taken all over the world and in our country. After the first case appeared in our country on 11.03.2020, on 13.03.2020, primary and secondary schools and universities were suspended throughout the country, and the activities of all places where people could be found together were suspended. It has been shown in international and domestic research that breaks in education have great negative effects on student education and training. According to the research results of Carlsson et al., 1% of the standard deviation values obtained because of ten days of additional training significantly increase the crystallized intelligence scores in information use tests. It has been determined that 6% of the standard deviation value is lost due to the effect of school closures, i.e., 12 weeks less education. In the same vein, Lavy et al., (2015), states that the duration of education has a significant effect on test score values and emphasizes that this situation differs between countries (Burgess & Sievertsen, 2020, as cited in Balci, 2020). In the study conducted by Aytaç (2020), school administrators stated that during the pandemic process, school administrators experienced problems such as not being able to provide students with motivation to learn and parents not being able to create a learning environment for students at home. Furthermore, children under quarantine experienced four times more stress as well as psychological and behavioral problems. In this direction, it is thought that instead of stopping or interrupting education to protect from the effects of the pandemic, it will be more effective and beneficial to develop a health and safety culture by focusing on OHS practices. It was seen that this situation was in the same direction as the school administrators expressed. Emphasizing that the measures taken due to the seriousness of the issue will vary according to the sectors, eleven guides have been published by the Ministry of Health Science Board on this issue. According to this guide, the recommended measures were shared with the public, considering the working environments, the characteristics of the work, and the working conditions, and the employer was held liable for taking these measures (Ateş, 2020). Therefore, school principals who work as employers' representatives in schools are also under this obligation. Taking these measures has once again emphasized the seriousness of the OHS practices managed in organizational environments, and it has been observed that the culture of safety and health continues even in environments where OHS management is applied or not.

Töre et al. (2021), state that the pandemic period has improved the process of complying with the hygiene rules in OHS practices and created a serious awareness among school stakeholders, and that the hygiene measures taken can be highly standardized. Dilaver

(2020), in his study on the impact of the covid-19 pandemic process on OHS practices, stated that the general views of the research participants were that both employers and employees increased their OHS awareness during this period. In addition, it was stated that due to the increase in the sensitivity of the employees to the OHS rules, a decrease in occupational accidents, compliance with the hygiene rules, improvement in the communication of the employees with the OHS professionals, and an increase in the desire of the employees to take responsibility for OHS were observed. In the study of Can and Hüseyinli (2017) on the OHS culture in the working environment, as the safety needs and personal priorities of the employees in OHS issues increased, the efforts of the employees to the OHS procedures, supporting and applying the OHS regulation rules, and the use of OHS equipment increased. In addition, it has been observed that safe behaviors such as the desire to perform additional tasks for OHS practices and the desire to participate in activities have increased. It is seen that the 'security need' in Maslow's hierarchy of needs increases especially during periods when health and safety situations such as natural disasters are at risk. It has been determined that all the safe behaviors related to OHS in general in the pandemic period research findings are in line with the findings of this study, not only as a legal obligation but also willingly.

Recommendations

Training to be given to administrators and school staff by OHS experts may be more accurate for OHS objectives.

Information on OHS process practices in other sectors can be exchanged.

Assistance can be obtained from the OSGB for the methods followed in the school OHS practices of the provincial and district organizations of the MoNE.

The Occupational Health and Safety Management System can be developed only for schools.

Studies on school safety coaching can be conducted.

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Conflict Statement

There is no conflict of interest that the authors will declare in the research.



Okul İş Sağlığı ve Güvenliği Uygulamaları Performans Göstergelerinin Okul Yöneticileri Tarafından Değerlendirilmesi

Özet

Bu çalışmanın amacı okul yöneticilerinin İSG uygulamasının etkililiğine ilişkin görüşlerini ortaya koyarak okul İş Sağlığı ve Güvenliği [İSG] performans göstergelerini belirlemektir. Bu amaç doğrultusunda yarı yapılandırılmış görüşme formu oluşturulmuştur. Amaçlı örnekleme yöntem türlerinden biri olan ölçüt örnekleme ile belirlenmiş Millî Eğitim Bakanlığına [MEB] bağlı 50 ve daha fazla çalışanı olan kamu ve özel okullar ile ilk, orta ve liselerde görev yapan on okul yöneticisine uygulanmıştır. Analizler sonucunda altı ana kategoriye (İSG Eğitim Etkililiği, İSG Bilinci, İSG Materyal Etkililiği, İSG Yönetimsel Etkililiği, Öğretmen ve Öğrenci İSG Tutum ve Davranışları, Pandemi İSG Etkililiği) ulaşılmıştır. İSG Materyal Etkililiği ana kategorisi üç alt kategoriye (Görsel Materyal Anlaşılabilirliği, Görsel Materyal Etkililiği, İSG Materyal Kullanımı Yeterliliği) ayrılmıştır. İSG Yönetimsel Etkililik ana kategorisi "Yönetimsel Görev ve Sorumluluk Bilinci" ve "Karşılaşılan Yönetimsel Sorunlar ve Çözümleri" olarak iki alt kategoriye ayrılmıştır. Bulguların okul İSG performans göstergesinin oluşturulmasına büyük katkı sağlayacağı düşünülmektedir. Araştırmacılara İş Sağlığı ve Güvenliği Yönetim Sisteminin [OHSAS] sadece okullar için uygulanabilecek bir sürümü geliştirilebileceği ve okul güvenliği koçluğu konusunda çalışmalar yapılabileceği önerisinde bulunabilir.

Anahtar Kelimeler: Performans, iş sağlığı ve güvenliği, okul iş sağlığı ve güvenliği, öğretmen.

Giriş

"İş güvenliği" kavramı çalışanların teknik risklere karşı korunmasını ifade ederken, "iş sağlığı" ise tüm çalışanların fiziksel, zihinsel, sosyal, ahlaki ve iyilik hallerinin en üst düzeyde tutulması ve sürdürülmesi anlamına gelmektedir. İşyerlerinde bunu başarmak için kötü sağlık koşullarını ortadan kaldırmak ve olumsuz koşullardan korunmak gerekir. Çalışanlar beden ve ruhen uygun işlere yerleştirilmeli, işin kişiye göre uyarlanması ve kişinin işe uyumu sağlanmalıdır. İş güvenliği ise işyerlerinde iş uygulamaları nedeniyle ve iş sırasında meydana gelebilecek hasar ve arızaların araştırılarak ortadan kaldırılması ve işin sürekliliğinin sağlanması amacıyla yapılan teknik ve sistematik çalışmalar olarak tanımlanmaktadır (Demir, 2006).

Yirminci yüzyılda iş sağlığı ve güvenliğine ilişkin gelişmeler tüm dünyayı ilgilendiren bir konu haline gelmiştir. Birleşmiş Milletler [BM] bünyesindeki Uluslararası Çalışma Örgütü [ILO], İSG ile ilgili konularda önemli çalışmalar yürütmektedir. 1946 yılında BM ile ILO arasında imzalanan anlaşmayla ILO bir ihtisas kuruluşu haline gelmiştir. ILO ve Dünya Sağlık Örgütü [DSÖ] ve bu kuruluşlarla iş birliği yapan birçok kuruluş iş sağlığı ve güvenliği açısından önemli çalışmalar yürütmektedir. Ülkemizin de üyesi olduğu ILO'nun kimyasal maddeler için belirlediği "işyerinde maruz kalma değerleri", iş sağlığı ve güvenliği konusunda alınan kararlar ve oluşturulan uluslararası anlaşmalar İSG sorunlarının çözümüne katkı sağlamıştır. Avrupa Birliği'nin, Aralık-1999'daki zirvesinde, Türkiye'ye adaylık statüsünün tanınmasıyla birlikte, 2003 yılında 4857 sayılı İş Kanunu çıkarılmıştır. Bu kanunun iş sağlığı ve iş güvenliği ile ilgili hükümleri, belki birkaç madde dışında, aynen 1475 sayılı İş Kanunundan aktarılmıştır. Ancak,

4857 sayılı İş Kanunu'na göre çıkarılması gereken yönetmelikler, Avrupa Birliğinin 89/391/EEC sayılı çerçeve direktifine ve diğer bireysel 28 direktiflere göre uyumlaştırılmıştır ve 2003 yılı ile 2004 yılı içerisinde art arda yayımlanmıştır (Çetindağ, 2010).

6331 sayılı İş Sağlığı ve Güvenliği Kanunu'nun 4. maddesi uyarınca işveren, İSG ile ilgili sağlık ve güvenlik önlemlerine uyulup uyulmadığını denetlemek ve ortaya çıkan sorunların çözümlenmesini sağlamakla yükümlüdür. Bu kanunun risk değerlendirmesine ilişkin 10'uncu maddesine göre çalışma ortamının ve çalışanların İSG açısından maruz kaldığı risk faktörlerinin ortadan kaldırılması için gerekli kontrol, ölçüm ve incelemelerin yapılması gerekmektedir. İş Sağlığı ve Güvenliği Kurulları Yönetmeliği'nin 8. maddesine göre İSG kurullarının temel görevi, kurumun niteliğine uygun taslak İSG iç yönergesi hazırlayarak işveren veya işveren vekili onayına sunmaktır. Hazırlanan yönetmeliğin uygulanmasının gözlemlenmesi, gözlem sonuçlarının raporlanması, alınacak önlemlerin belirlenmesinin sağlanması, işyerinin İSG ile ilgili mevcut durumu hakkında yıllık rapor hazırlanması, bir önceki yıla ilişkin çalışmaların değerlendirilmesi ve iş birliği yapılması diğer kurumlarla ilişkiler de bu kurulların diğer görevleri arasındadır (İş Sağlığı ve Güvenliği Kanunu, 2012).

İSG uygulamaları, eğitim kurumlarında çalışanları ve öğrencileri stres, kaygı ve tehlikelerden uzak tutarak güvenli bir eğitim ve çalışma ortamı sağlar. Bu durum okulu oluşabilecek tehlike ve risklerden arındırarak bireylere güvenli bir okul ortamı sağlayacaktır. Öğretmen, öğrenci ve personelin fiziksel ve psikolojik rahatlık ve huzur duygusu okul güvenliği kavramıyla ifade edilmektedir. Bu nedenle İSG uygulamalarıyla oluşturulacak güvenli bir okul ortamı, bireylerin kendilerini daha rahat hissetmeleri ve performanslarını en iyi şekilde göstermeleri açısından önemli görülmektedir (Çay, 2019).

Okul güvenliği planının amacı, başarının ödüllendirildiği ve tüm öğrencilerin tehlikelerden, şiddetten, zararlı bağımlılıklardan ve korkudan uzak, öğretmenlerin öğretebileceği ve öğrencilerin de öğrenebileceği bir ortamda gelişeceği bir okul iklimi yaratmak ve sürdürmektir (Stephens, 1998). Okul yöneticilerinin okul güvenliği konusunda yapması gereken uygulamalar, okulun iklimi, kültürü ve eğitim kalitesi açısından gerekli önlemlerin alınmasıdır. Okul güvenliğine yönelik yapılan planların amacı budur.

Okullarda uygulanan İSG uygulamaları ve sonuçlarına ilişkin çalışmalar yapılmış ancak İSG'nin uygulandığı diğer sektörlerde kullanılan ve İSG uygulamalarının etkililiğinin belirlenmesini, eksikliklerinin ortaya çıkarılmasını sağlayan İSG performansına ilişkin herhangi bir çalışmaya rastlanmamıştır. Bu bağlamda okul yöneticilerinin, öğretmenlerinin, öğrencilerin ve çalışanların İSG konusundaki farkındalık düzeyleri ile İSG uygulamalarına ilişkin görüşleri gibi konularda İSG yönetiminin yeterince etkili olup olmadığını değerlendirecek bir performans ölçeğinin geliştirilmesinin gerekli olduğu ve yöneticilere büyük katkı sağlayacağı düşünülmektedir. Bu amaç doğrultusunda okullardaki İSG uygulamalarının derinlemesine incelenmesi ve durum tespitinin yapılması İSG performans ölçeği geliştirme çalışmalarına büyük katkı sağlayacağı düşünülmektedir.

Yöntem

Nitel araştırma yöntemi ile araştırılmak istenen durumun derinlemesine analizinin yapılması istenmiş ve bu doğrultuda çalışma, istenilen olgunun derinlemesine incelenmesine olanak sağlayan 'fenomenoloji' tasarımı ile gerçekleştirilmiştir. Bu örüntü, bildiğimiz ancak detaylı ve derinlemesine bir anlayışa sahip olmadığımız olgulara odaklanmaktadır (Yıldırım & Şimşek, 2016). Fenomenolojik araştırma iki şekilde ele alınır. Bunlar betimleyici ve yorumlayıcı fenomenoloji yaklaşımlarıdır. Araştırmanın temel amacı araştırmaya katılan okul yöneticilerinin İSG uygulamalarına ilişkin görüş ve deneyimlerini betimlemek olduğundan betimsel fenomenoloji tercih edilmiştir (Ersoy, 2017). Bu bağlamda okul yöneticilerinin İSG uygulamalarını derinlemesine incelemek amacıyla yarı yapılandırılmış görüşme formu uygulanmıştır. Elde edilen veriler NVIVO programında analiz edilmiştir. Araştırmanın evreni İstanbul genelinde 50 ve daha fazla çalışanı bulunan ve İSG uygulamaları yapan okullar olarak belirlenmiştir (İş Sağlığı ve Güvenliği Kanunu, 2012). Evrenin tamamına ulaşmak zaman ve imkanlar doğrultusunda mümkün olmadığından nüfus evrendeki ağırlığıyla orantılı örneklem belirlenmiştir (Yıldırım & Şimşek, 2008). 2021–2022 eğitim-öğretim yılında İstanbul'un 39 ilçesinin 25'i (%64.1) Avrupa Yakasında, 14'ü (%35.9) Anadolu Yakasında yer almaktadır (Millî Eğitim Bakanlığı İstatistikleri, 2020). Bu oran içerisinde Türkiye'deki tabaka veya alt grupları temsil etmeyi amaçlayan örnekleme türü olan 25/39 ve 14/39 oranlarında tabakalı örnekleme yöntemi kullanılarak Avrupa Yakasından altı, Anadolu Yakasından ise üç ilçe belirlenmiştir. Seçilen tabakaların oranları dahilinde, İstanbul'daki ilçeler basit tesadüfi örnekleme yöntemleri kullanılarak kura ile seçkisiz olarak belirlenmiştir (Büyüköztürk vd., 2012, akt. Koç, 2017). Avrupa Yakasından altı ilçe (Esenyurt, Silivri, Bahçeşehir, Fatih, Büyükçekmece, Esenler), Anadolu Yakasından üç ilçe (Kadıköy, Üsküdar, Kartal) seçilmiştir. İSG mevzuatına (Millî Eğitim Bakanlığı [MEB], 2014) uygun olarak 50 ve daha fazla çalışanı olan okullarda okul yöneticisinin işveren vekili olarak görevlendirildiği belirtildiğinden, çalışma grubuna katılım kriteri 50 ve daha fazla çalışanı olan okul yöneticisi olma şartı esas alınmıştır. İlköğretim okulları, ortaokullar, fen liseleri, anadolu liseleri, meslek liseleri ve imam hatip okullarında, amaçlı örnekleme yöntemlerinden biri olan ölçüt örnekleme (Patton, 1990) ile 50 ve daha fazla çalışanı olan okullar tesadüfi olarak belirlenmiştir. Seçilen okullarda nitel araştırma amacıyla hazırlanan yarı yapılandırılmış görüşme formu, bu okullarda çalışma grubu olarak belirlenen okul yöneticilerine uygulanmıştır. Creswell'e (2017) göre fenomenolojide formun uygulanacağı katılımcı sayısı 3 ile 10 arasında olmalıdır. Bu bilgiler doğrultusunda belirtilen okullarda görev yapan 10 okul yöneticisi çalışmaya dahil edilmiştir.

Araştırmanın Etik İzinleri:

Bu çalışmada "Yükseköğretim Kurumları Bilimsel Araştırma ve Yayın Etiği Yönergesi" kapsamında uyulması gerektiği belirtilen tüm kurallara uyulmuştur. Yönergenin ikinci bölümü olan "Bilimsel Araştırma ve Yayın Etiğine Aykırı Eylemler" başlığı altında belirtilen eylemlerin hiçbiri gerçekleştirilmemiştir.

Etik Kurul İzin Bilgileri:

Etik değerlendirmeyi yapan kurulun adı = Kırşehir Ahi Evran Üniversitesi Sosyal ve Beşeri Bilimler Bilimsel Araştırma ve Yayın Etik Kurulu

Etik kurul etik inceleme karar tarihi= 25.03.2022

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Bulgular

Analizler sonucunda altı ana kategoriye ulaşılmıştır: İSG Eğitim Etkinliği, İSG Bilinci, İSG Materyal Etkililiği, İSG Yönetmelik Etkililiği, Öğretmen ve Öğrenci İSG Tutum ve Davranışları, Pandemi İSG Etkililiği. İSG Materyal Etkililiği ana kategorisi üç alt kategoriye ayrılmıştır: “Görsel Materyal Anlaşılabilirliği”, “Görsel Materyal Etkililiği”, “İSG Materyal Kullanımı Yeterliliği”. İSG Yönetmelik Etkililiği: “Yönetimsel Görev ve Sorumluluk Bilinci” ve “Karşılaşılan Yönetmelik Sorunlar ve Çözümleri” olmak üzere iki alt kategoriye ayrılmıştır.

Tartışma ve Sonuç

Okul müdürlerinin İSG Eğitim Etkinliği kategorisine ilişkin görüşleri incelenmiş ve genel görüşler İSG eğitimlerinin etkili olmadığı yönünde değerlendirilmiştir. Örgüt ortamındaki tehlike ve risklerden korunabilmek için örgüt çalışanlarına İSG eğitimleri verilmelidir (Akpınar & Ögütöğulları, 2016). Yapılan değerlendirmelerde, okul yöneticilerinin uygulanan İSG eğitimlerini yeterince etkili bulmadıkları ve “Etkili hale getirmek için neler yapılabilir?” yönünde yapılan yorumlarda, ihtiyaçların belirlenmesi ve bu doğrultuda eğitimlerin yapılmasının gerekliliği vurgulanmıştır. Okul yöneticilerinin İSG eğitimlerinin iyileştirilmesine yönelik yaptığı yorumların özellikle eğitimlerin yetkin kişiler tarafından verilmesi doğrultusunda olduğu tespit edilmiştir. Bu doğrultuda eğitim programlarının uygulanabilmesi için belirli yeterliliklere sahip profesyonellere ihtiyaç duyulmaktadır. Bu profesyonellerin iş güvenliği uzmanı, alan uzmanı, işyeri hekimi, amir, koordinatör veya bu alanda eğitim almış çalışanlar olması gerektiği düşünülmektedir. Okullarda yürütülen İSG eğitimlerinin okul paydaşlarının İSG tutum ve davranışları üzerinde büyük etkisi olduğu, özellikle okul yöneticilerinin İSG eğitim sürecinin yönetiminde görsel içeriklerin yanı sıra örnek olay çalışmaları ve uygulamalı anlatımlara da yer verilmesi amaca ulaşılmasında büyük katkı sağlayacağı görülmüştür. İSG eğitimlerinin İSG uygulamalarına katkısının yanı sıra güvenlik bilincini artırıcı etkisinin de olduğu görülmektedir. Özellikle Dursun (2014), çalışma ortamlarında güvenlik bilinci ile İSG davranışları arasındaki ilişkiyi araştırmış ve güvenlik bilincinin geliştirilmesinde İSG eğitimlerinin büyük önem taşıdığını belirlemiştir. Ayrıca mevcut durumdaki eksikliklerin giderilmesi için iş güvenliği ve güvenli davranışın öneminin eğitimin her aşamasında vurgulanması gerektiği, İSG eğitimlerinin güvenli davranış ve İSG bilinci ile ilgili faydalarının yanı sıra çalışma ortamında İSG kültürünün gelişmesine de katkı sağlayacağı belirtilmiştir. Genel olarak İSG eğitimlerinin ya yapılmadığı ya da eksik olduğu, İSG eğitimlerinin çalışma ortamındaki kazaların ve risk faktörlerinin önlenmesine katkı sağlamadığı, İSG uygulamalarının asıl amacına hizmet edemediği vurgulanmıştır. Yılmaz (2009), Türkiye’de İSG ile ilgili en önemli konunun İSG eğitimleri olduğunu ancak gerekli önemin gösterilmediğini belirtmiştir. İSG eğitimlerinin etkililiğine vurgu yapılmasının İSG eğitimlerindeki eksikliklerin giderilmesinde faydalı olacağı düşünülmektedir. Bulgular, İSG

eğitim eksikliklerinin sonuçlarına odaklanırken, bu eğitimlerin verilmesinde ve yürütülmesinde görev alan yönetim kademesi veya işveren temsilcilerinden pek bahsedilmediği ayrıca İSG eğitim içeriğine ve okul yöneticilerine yönelik yol gösterici bir çalışmanın da bulunmadığı görülmektedir. Çalışmanın bu durumdan kaynaklanan eksikliklerin giderilmesinde yol gösterici olacağı düşünülmektedir.

İSG bilinci konusunda okul müdürleri, okul paydaşlarının konuya ilişkin farkındalığının yeterli olduğunu, yapılan uygulamaların öğretmenlerin farkındalık düzeyini artırdığını ifade etmiştir (Dursun, 2014). Okul yöneticilerinin İSG bilincine ilişkin yaptıkları yorumlar doğrultusunda özellikle öğretmenlerin güvenlik farkındalıklarının kıdem ve yıla bağlı olarak arttığı gözlemlenmiştir. Bu doğrultuda genç öğretmenlerin İSG uygulaması noktasında yeterli hassasiyete sahip olmadıkları, dolayısıyla yaşanan risk durumlarında istenilen güvenli davranışların gözlemlenmediği tespit edilmiştir. Ayrıca Dursun ve Keser'e (2014) göre örgütte çalışanların güvenlik farkındalıkları iş güvenliği davranışları üzerinde etkili bir faktördür ve çalışanların güvenlik farkındalıkları arttıkça güvenlikle ilgili konulara daha fazla katılım göstermektedirler. Dolayısıyla çalışanların güvenlik bilincini artırıcı faaliyet ve düzenlemelerin iş kazalarının azaltılmasında büyük önem taşıdığı söylenebilir. Bunun için güvenlik misyonu, sloganlar, materyal yayınlar (kütüphane, istatistik, bültenler vb.), logolar, medya araçlarının etkin kullanımı, etkili İSG eğitimleri ve İSG kültürü, güvenlik bilincinin geliştirilmesinde önemli fark yaratacaktır (Dursun & Keser, 2014).

Okul yöneticilerinin “İSG Materyal Etkililiği” kategorisine ilişkin yaptıkları değerlendirmelerde görsel materyallerin anlaşılabilirliği alt kategorisi için “görsel materyallerin anlaşılır olması ve anlaşılabilirliğinin artırılması gerektiği” tespit edilmiştir. Bu alt kategoriye ilişkin değerlendirmeler konunun iyi anlaşıldığını göstermektedir. “Görsel materyal etkililiği” alt kategorisinde okul yöneticileri “görsel materyallerin etkili olduğunu”, “görsel materyallerin etkililiğinin artırılabilirliğini” ve “görsel materyallerin etkili olmadığını” belirtmişlerdir. Baskın görüşün “Görsel materyallerin etkili olmadığı” bulgusuna ulaşılmıştır. Duyu organlarına hitap eden öğretim, teknolojilerle desteklendiği takdirde öğrenilenlerin daha kalıcı olacağı ifade edilmiştir (Erdemir & Bakırcı, 2016). Bu nedenle görsel materyallerin amaca ve hedef kitlenin özelliklerine göre hazırlanması etkililiği artıracaktır. Özellikle görsel algılama sürecinde algıyı yaratmaya yönelik içeriğin kalitesi, etkili ve başarılı bir mesaj sisteminin oluşturulması görsel tasarımın etkililiğini artırmaktadır. Bu doğrultuda tasarımı oluştururken algılama sürecinde karşılaşılan farklı hedef kitle niteliklerine ve beklentilerine uygun tasarım içeriklerinin oluşturulması gerekmektedir. Bu tasarımlar etkili görsel algılama süreci doğrultusunda istenilen sonuçların elde edilmesine, etkili geri bildirim alınmasına ve etkili bir görsel anlayışın oluşturulmasına yardımcı olmaktadır. Okul yöneticilerinin değerlendirmeleri doğrultusunda öğretmenlerin İSG araç ve gereçlerinin (yangın söndürücü, uyarı levhaları, emniyet şeritleri vb.) kullanımında yeterli oldukları ancak öğrencilerin istenilen düzeyde yeterli olmadıkları belirtilmiştir. Bu olumsuz durumun ortadan kaldırılması için öğretmenlerin öğrencilere daha yakın olmaları nedeniyle araç ve gereç kullanımında güvenlik koçluğu görevini üstlenmeleri gerektiği düşünülmektedir. Güvenlik koçluğu yöntemiyle eksik İSG materyallerinin öğretmen ve öğrenciler tarafından kullanımında yaşanan sorunların giderilmesine yardımcı olacağı düşünülmektedir. Okullardaki İSG uygulamalarında İSG bilincinin yönetici ve öğretmenlerden ziyade öğrencilerde geliştirilmesi gerektiği

vurgulanmıştır. İSG eğitimlerinde İSG görsel materyallerinin kullanılması İSG materyallerinin etkililiğinin dolaylı olarak arttırılmasına katkı sağlamaktadır. Bayram'ın (2020) çevrimiçi İSG eğitimlerinin kalitesini araştırdığı çalışmasında, görsel içerikle desteklenen, sürükleyici bir şekilde kurgulanan, akıcı anlatımlarla ifade edilen İSG eğitimlerinin etkililiğinin artacağı belirtilmiştir.

İSG yönetsel etkililik kategorisinde okul yöneticileri tarafından yapılan değerlendirmeler “Yönetsel Görev ve Sorumluluk Bilinci”, “Yönetsel Sorunlar ve Çözüm Önerileri” alt kategorilerinde ifade edilmektedir. Bu alt kategorilerde yapılan değerlendirmelerde görev ve sorumluluk bilincinin yeterli düzeyde olmadığı bulgusuna ulaşılmıştır. Süreç olarak yönetim, bilim olarak, sistemli ve bilimsel bilgi topluluğunu; sanat olarak, bir uygulamayı; bir dizi faaliyet ya da işlemleri ifade eder (Mucuk, 2008). Bu bağlamda yönetimde sorumluluk duygusunun geliştirilmesi, yönetilen konunun bilimsel süreçlerine sistematik bir yaklaşım gerektirir. Bunun için okul yöneticilerinin İSG uygulamaları konusunda yeterli eğitim almaları gerekmektedir. Organizasyonun verimliliği ve etkililiği, organizasyonun hedeflerine ulaşma derecesine bağlıdır. Bu da ancak örgütsel unsurların uyumlu çalışmasıyla sağlanabilir (Genç, 2005). Okul yöneticilerinde sorumluluk bilincinin gelişmesi okuldaki İSG kültürünü olumlu yönde etkileyecektir. Bir örgütteki grup ve bireylerin düşünce, değer, yeterlilik, davranış ve algılama modellerinin bir ürünü olarak tanımlanan güvenlik kültürünün, okul yöneticilerinin liderliğinde oluşturulacağı vurgulanmıştır (Şensöğüt, 2018). Okullarda İSG yönetimi, okul yöneticilerine yüklenen görev ve sorumlulukları artırsa da en ideal eğitim ve öğretimin, en iyi yönetilen İSG uygulamalarıyla mümkün olacağı ifade edilmektedir. Eğitimin aksamaması nedeniyle oluşacak maddi ve manevi kayıpların hem insanlara hem de ülke ekonomisine büyük zarar vereceğini belirtilmiştir. Çalışma ortamından kaynaklanan tehlikeler nedeniyle çalışanlar yaralanmakta, sakatlanmakta veya ölmektedir. İSG uygulamalarının ihmal edilmesi, ekonomik maliyetleri büyük ölçüde arttırdığından ülkelerin en çok odaklandığı sürdürülebilir sosyal ve ekonomik kalkınmayı sekteye uğratacağı ileri sürülmektedir (Serin & Çuhadar, 2015).

Çay'a (2019) göre okullarda görev yapan yöneticilerin bir kısmı İSG uygulamalarının ciddi şekilde yönetildiğini belirtirken, önemli bir kısmı ise bu uygulamaların sadece göstermelik olduğunu ve bu durumun değiştirilmesi için gerekli çalışmaların yapılması gerektiğini ifade etmiştir. Diğer alt kategori olan “yönetsel sorunlar ve çözüm önerileri” ne ilişkin ifade edilen görüşlerin ise bilgi eksikliği, gerekli finansal kaynakların bulunmaması, gerekli önemin verilmemesi, zorunlu İSG uygulamaları ve iş yükünün fazla olması merkezinde değerlendirildiği görülmüştür. Bu alt kategoriler arasında en çok dile getirilen görüşün bilgi eksikliği ve iş yükünün fazla olması ile ilgili olduğu görülmüştür. Benzer bulgulara sahip olan Yılmaz'ın (2009) çalışmasına göre İSG ile ilgili faaliyetlerin eğitim, bilgilendirme, koordinasyon ve konu ile ilgili uzman eksikliği gibi olumsuz koşullar altında yürütüldüğü ifade edilmiştir. 6331 sayılı İSG Kanununun kapsamına özel sektör işyerlerinden sonra 2012 yılında kamu kurumları da bu kanunun kapsamına alınmıştır. Bu kanunla kamu yöneticileri üstlendikleri birçok hukuki sorumluluk ve yükümlülüğü üstlenmek zorunda kalmıştır (Akaner, 2022). Yöneticilere düşen yükümlülüklerin en ağır olarak görülen 6331 sayılı İSG Kanununun maddesi, işyerlerinde İSG uygulamalarına ilişkin iş ve işlemlerin yürütülmesi sorumluluğunu işveren vekili olarak kamu yöneticilerine yüklemektedir. Bu durum yöneticilerin özellikle

çalışma alanlarında hukuki öncelikleri belirlemede zorluk yaşamalarına neden olabilmektedir. Bunun yanında çalışma ortamındaki risk faktörlerinin belirlenmesine yönelik risk analizleri yapan İSG profesyonellerinin istihdamına ilişkin kanunun sürekli ertelenmesi, risk analizi konusunda yeterli teknik bilgiye sahip olmayan yöneticilerin güvenlik açıklarına neden olabilecek durumların tespiti konusunda kendilerini yetersiz hissetmelerine neden olabilmektedir. Ayrıca okul yöneticilerinin hem eğitim hem de İSG ile ilgili iş yükünün fazla olması, İSG uygulamalarında sorumluluk alma farkındalıklarının azalmasına neden olabilir. Alanyazına ilişkin yapılan araştırma bulgularının İSG uygulamaları ile ilgili belirlenen eksikliklerle birlikte değerlendirilmesinin daha faydalı olacağı düşünülmektedir.

Öğretmen ve öğrenci İSG tutum ve davranışları kategorisine ait görüşlerin öğretmenlerin tutum ve davranışları “olumlu”, “olumsuz” ve “kişiye göre” değişebildiği şeklindedir. Bu kategorinin yoğunlaştığı görüş, öğretmen ve öğrencilerin İSG tutum ve davranışlarının olumsuz olması yönündedir. İnsanlarda düşünce duygu, tutum, algı vb. özellikler davranışları için oldukça önemlidir. Bu yüzden iş güvenliği ile ilgili davranışlar incelenirken, çalışanların İSG ile ilgili tutum ve algıları hakkında bilgi sahibi olmak büyük önem arz etmektedir (Dursun & Keser, 2014). Bu açıdan okul yöneticilerinin İSG'ye yönelik tutumlarının olumlu olduğu ve bunun davranışlarına da olumlu yansıdığı görülmektedir. Okul yöneticilerinin İSG konusunda iyi tutum ve davranışlara sahip olması önemlidir ancak yeterli değildir. Yöneticilerin bunu okul kültürüne de yansıtması gerektiği görülmektedir. Çünkü davranışların topluma yayılmasında örgüt kültürü önemli bir yere sahiptir. Özellikle Nielsen (2014), insan davranışlarının kültürle yakın ilişki içinde olduğunu ve iş güvenliği kültürünün yüksek olduğu ülkelerde iş kazası oranlarının çok düşük seviyelerde görüldüğünü belirtmiştir. Bu bağlamda okul güvenliği kültürüne yansıyan tutumlar yardımıyla okul personelinin, öğretmenlerin ve öğrencilerin davranışlarının bu yönde geliştirilerek İSG risk faktörlerinden ve tehlikeli durumlardan korunmanın sağlanacağı söylenebilir.

Öğretmenlerin tutum ve davranışlarının iyileştirilmesi gerekmektedir. Bu nedenle okul yöneticilerinin okullardaki İSG uygulamalarına ilişkin öğretmenlere verecekleri görev, sorumluluk ve İSG eğitimlerinin, öğretmenlerin İSG bilinci kazanmalarına yardımcı olacağı ve İSG tutum ve davranışlarının olumlu yönde gelişmesine katkı sağlayacağı düşünülebilir (Türüdü, 2019). Çalışanların güvenli davranışlarını belirleyen ve yönlendiren en önemli faktörlerin örgüt yönetiminin İSG konusundaki düşünce, tutum, davranış ve algıları olduğu ifade edilmiştir. Yönetimin İSG uygulamalarına verdiği önemin artmasıyla birlikte çalışanların İSG yönetmelik prosedürlerine, ekipman kullanımına ve eğitimlere olan duyarlılığının da arttığı gözlemlenmiştir (Can & Hüseyinli, 2017). Bu bağlamda araştırmanın bulguları incelendiğinde öğretmen ve öğrencilerin İSG tutum ve davranışlarındaki olumlu değişikliklerin okul yönetiminin yaklaşımlarına bağlı olduğu düşünülmektedir. Yönetimin İSG yaklaşımlarının iyi olduğu okullarda gerçekleştirilen Öztürk'ün (2020) çalışmasına göre, iyi bir İSG kültürü oluşturmayı hedefleyen okul yönetimine sahip meslek lisesi öğrencilerinin İSG kurallarına riayet ettikleri, İSG hakkında bilgi sahibi oldukları ve İSG uygulamalarına ilişkin tutum ve davranışları olumlu olduğu görülmüştür.

Pandemi gibi salgın hastalık durumlarının İSG uygulamalarına olan bakış açısını nasıl etkilediği ile ilgili okul yöneticilerin görüşlerine bakıldığında, görüşlerin geneli pandemi

döneminin, İSG uygulamalarına olan bakış açısını olumlu etkilediği yönündedir. Pandemi döneminde tüm dünyada ve ülkemizde de ciddi tedbirler alınmıştır. Ülkemizde 11.03.2020 tarihinde ilk vaka çıktıktan sonra 13.03.2020'de ülke genelinde ilk ve orta dereceli okullar, üniversiteler tatil edilmiş ve insanların toplu halde bulunabileceği bütün mekanların faaliyetlerine ara verilmiştir. Eğitime verilen araların, öğrenci eğitimi ve öğretimi üzerinde büyük olumsuzlukları olduğu yurtdışı ve yurt içi yapılan araştırmalarda gösterilmektedir. Carlsson vd., (2015) araştırma sonuçlarına göre: Uygulamaya konan on günlük ilave eğitim sonucunda elde edilen standart sapma değerlerinin %1'i kadarının bilgi kullanım testlerinde kristalize zekâ puanlarını önemli ölçüde artırdığı görülmüştür. Okul kapanmalarının etkisi ile yani on iki hafta daha az eğitim almanın standart sapma değerinin %6'sının kaybolmasına sebep olduğu tespit edilmiştir. Uzaktan eğitim, gelişmiş eğitim teknoloji sistemine ihtiyaç duyar fakat dünya üzerinde bu yönde tam olarak hazırlanmış çok az sayıda uzaktan eğitim teknolojileri sistemi mevcuttur. Var olan bu sistemler ile öğrencinin evde normal programını sürdürebilmesi için bilgisayar ve diğer bilişim teknolojilerine sahip olması gerekmektedir. Çevrimiçi olarak ifade edilen uzaktan eğitimde derslerin takip edilebilmesi için sessiz bir oda, uygun şartlar ve bu durumu kanıksamış özellikteki ebeveynler olması gerekmektedir. Fakat bu konuda ülkemizde büyük eşitsizlikler söz konusudur. Özellikle ailelerin sosyal ve ekonomik durumlarının aynı olmadığı görülmektedir (Balcı, 2020). Aytaç'ın (2020) yapmış olduğu çalışmada pandemi sürecinde okul yöneticileri, öğrencilerin öğrenme motivasyonunu sağlayamama ve velilerin öğrenciler için evde öğrenme ortamı oluşturamama gibi sorunlar yaşadıklarını ayrıca karantina altındaki çocukların dört kat daha stres yaşadıklarını bunun yanında psikolojik ve davranışsal sorunlarının oluştuğunu ifade etmiştir. Bu doğrultuda eğitim öğretimin pandeminin etkilerinden korunmak için durdurulması ya da ara verilmesi yerine İSG uygulamalarına ağırlık verilerek sağlık güvenlik kültürünün geliştirilmesini sağlamanın bu durum için daha etkili ve faydalı olacağı düşünülmektedir. Bu durumun okul yöneticilerinin ifade ettikleri ile aynı yönde olduğu görülmüş ve konunun ciddiyetine istinaden alınan önlemlerin sektörlere göre değişiklik göstereceği vurgulanarak bu konuya ilişkin Sağlık Bakanlığı Bilim Kurulu tarafından on bir rehber yayımlanmıştır. Bu rehberde çalışma ortamları ve yapılan işin özellikleri ile çalışma şartları göz önüne alınarak tavsiye edilen tedbirler kamuoyu ile paylaşılmış ve işveren bu tedbirleri almakla yükümlü tutulmuştur (Ateş, 2020). Dolayısı ile okullarda işveren vekili olarak görev yapan okul müdürleri de bu yükümlülüğün altına girmiştir. Bu önlemlerin alınması örgüt ortamlarında yönetilen İSG uygulamalarının ciddiyetini bir kez daha vurgulamış ve devamında İSG yönetiminin uygulandığı hatta uygulanmadığı ortamlarda bile güvenlik ve sağlık kültürünün devam ettiği görülmüştür.

Öneriler

Bu çalışmada elde edilen sonuçlara göre uygulayıcılara çeşitli önerilerde bulunulmuştur.

Okullarda yönetici ve okul personeline İSG uzmanları tarafından verilecek eğitimler İSG hedefleri açısından daha doğru olabilir.

Diğer sektörlerdeki İSG süreç uygulamalarına ilişkin bilgi alışverişinde bulunulabilir.

MEB il ve ilçe teşkilatlarının okul İSG uygulamalarında izlenen yöntemler için OSGB'den yardım alınabilir.

Sadece okullar için İSGYS geliştirilebilir.

Okul güvenliği koçluğuna yönelik çalışmalar yapılabilir.