



CULTURA DE SEGURIDAD

SAFETY FIRST

Space dedicated to common understanding and the promotion of Safety Culture through information, analysis, dissemination of experiences and related news.

THE TECHNIQUES FOR EVALUATING THE SAFETY CULTURE OF AN ORGANIZATION.



As we explained in this section of last September's newsletter, there are several techniques for conducting safety culture assessments. However, it is often the case that articles and studies rely solely on surveys as the sole technique, which is a mistake. Surveys or questionnaires have certain advantages, but their results by themselves are not sufficient to arrive at cultural conclusions. Below, we present some of the advantages and disadvantages of this technique and recommendations for its application.

Advantages:

- It allows for the collection of a significant amount of information due to the possibility of its simultaneous application to a large number of people or to the entire personnel of an organization.
- It is an easily applicable and completable technique, even more so when using a digital survey, where conditions permit. The latter facilitates the processing of responses for result analysis.
- The technique enables the registration of the respondent's perception, so if the sample is considerably large, it can reflect a trend in thought patterns or behavior within the organization.
- It is a technique that allows for quantifying results, which promotes:
 - Making comparisons and graphical or percentage presentations.
 - Enhancing the quality of discussions through the resulting graphics.
 - Evaluating the organization's progress in successive assessments by means of numerical and graphical comparisons.
 - Increased employee participation, given the equal opportunity to express opinions that this technique offers, and the possible interest of respondents in knowing the results.
 - Greater employee involvement in formulating suggestions for solving the problems revealed.



Disadvantages:

- It requires careful design to ensure the reliability and validity of the results. The language and terms in the survey can affect the interpretation of the questions.
- Numerical analyses of surveys must be conducted with caution, as they can be misleading. It should be noted that surveys primarily reflect personal perceptions and assessments, which can sometimes be distorted by the conscious or unconscious attempt to evade responsibilities regarding the subject in question.
- It is not a precise technique for determining underlying causes, i.e., the basic assumptions of behaviors.
- The value of the results depends considerably on the response rate.



Some of the rules or recommendations to consider for the application of this technique are as follows.

- You should aim to achieve a high response rate (RR), which is the ratio between the number of distributed surveys and the number of completed surveys received. A response rate greater than 75-85% can be considered acceptable. Some aspects that can contribute to a high RR include:
 - Conducting anonymous surveys.
 - Convincingly guaranteeing the confidentiality of the surveys.
 - Using, if possible, the organization's computer mechanisms to conduct electronic surveys that prevent the identification of the respondent by both the organization's personnel and the evaluation group.
 - In case electronic options are not possible, providing means (e.g., ballot boxes) for personally depositing the completed survey. Completed surveys should not be delivered through any manager, supervisor, or any other organization employee.
- Prior to its application, it should be ensured that the language and terms used in the survey are understandable to the respondents. A pilot test of the survey is recommended.
- Surveys should be completed individually to prevent group responses.
- Two types of surveys should be conducted: one for the organization's managers and another for the workers. Both surveys should be related to each other to facilitate the comparison of criteria and perceptions on the same subject.

- Avoid including questions in the survey for which the answer is known or evident to the evaluation group, as this unnecessarily increases the number of questions and the time required to complete the survey.
- Avoid very lengthy or very short surveys. In the first case, it may require a lot of time for the respondent, potentially leading to demotivation or hasty, unreflective responses to move through the questions quickly. On the other hand, a short survey, unless it addresses a single topic, can result in a missed opportunity to gather a wide range of responses on multiple topics of interest for the evaluation.

In upcoming newsletters, we will address other techniques for assessing and measuring Safety Culture. And remember:

If you are a manager or work on promoting Safety Culture, please be aware that the survey technique alone is not sufficient to draw conclusions about the state of safety culture in your organization. It is necessary to complement it with other recognized techniques.

[1] IAEA. IAEA TECHNICAL DOCUMENTS COLLECTION. TECDOC 1995 Safety Culture in Organizations, Facilities, and Activities Related to the Use of Ionizing Radiation Sources, Vienna, 2022.



VIRTUAL REGIONAL WORKSHOP ON RADIATION PROTECTION AND OPTIMIZATION IN THE DENTAL RADIOLOGY

DATE: DECEMBER 1ST

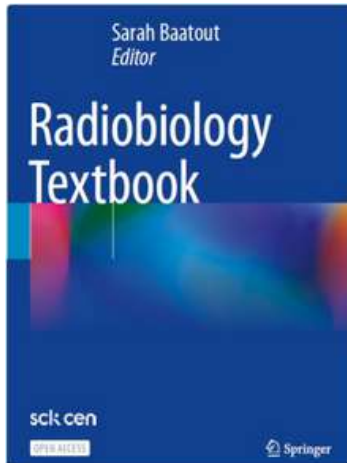
TIME: 4:00 P.M. CITY OF VIENNA

EXPERT: MR. GAINER RAÚL / JASA ANDRADE



Registration:

https://teams.microsoft.com/registration/kxTyotGkf0utB4Gcgk9cSg,6A9lQJsRI0Wcu5Os-JmYMw,ZY3cW_ndFkC55-yl-uaebg,3NPIPTaAyEWnw5-nnvMSLw,rCssQ58HmUOoIPkqmWNZ_A,9tD-CaPe3UyyQhGa_loqQg?mode=read&tenantId=a2f21493-a4d1-4b7f-ad07-819c824f5c4a



RADIOBIOLOGY TEXTBOOK

Radiobiology is the branch of biology that deals with the effects of ionizing radiation on living organisms. It is also a field of both clinical and basic medical science that involves the study of the effects of radiation on health and the application of biology to radiological techniques and procedures, both for treatment and diagnosis. Radiobiological research is multidisciplinary and forms the scientific basis for various disciplines such as radiological protection, radiotherapy, and nuclear medicine. The aim of this research is to better understand the effects of radiation exposure at the cellular and molecular levels to determine its impact on health.

This open-access textbook on Radiobiology focuses on various aspects of radiobiology and provides a unique perspective as it encompasses not only radiobiology but also radiophysics, radiotherapeutic oncology, radiochemistry, radiopharmacy, nuclear medicine, radiation space biology, environmental and human radiation protection, nuclear emergency planning, molecular biology, bioinformatics, as well as ethical, legal, and social considerations related to radiobiology. This range of disciplines contributes to making radiobiology a broad and fairly complex subject.

The book consists of 12 chapters with the following titles:

- Chapter 1. History of Radiation Biology
- Chapter 2. Basic Concepts of Radiobiology
- Chapter 3. Molecular Biology of Radiation
- Chapter 4. Mechanistic Radiation Biology, Modeling, and Dosimetry
- Chapter 5. Clinical Radiobiology for Radiotherapeutic Oncology
- Chapter 6. Radiobiology of Combining Radiotherapy with Other Cancer Treatment Modalities
- Chapter 7. Individual Sensitivity to Radiation and Biomarkers: Molecular Biology of Radiation
- Chapter 8. Radiobiology of Accidental, Public, and Occupational Exposures
- Chapter 9. Environmental Radiobiology
- Chapter 10. Space Radiobiology
- Chapter 11. Radioprotectors, Radiomitigators, and Radiosensitizers
- Chapter 12. Ethical, Legal, Social, and Epistemological Considerations of Radiation Exposure

In the link below, you can download the book for free:

<https://link.springer.com/book/10.1007/978-3-031-18810-7>



CALL FOR PAPERS

The 16th International Congress of the IRPA (IRPA16) will take place during July 7-12, 2024, in Orlando, USA, with the theme "Radiation Harmonization: Standing United for Protection". The International Congress Organizing Committee welcomes IRPA delegates and radiation safety professionals from around the world to come and share their knowledge and practices in radiation protection.

All abstracts must be submitted electronically through the abstract portal by **1 December 2023**. Abstracts submitted via e-mail, fax, or surface mail will neither be accepted nor acknowledged. Submitted abstracts can be revised through the portal during the abstract submission period. All submitted abstracts will be reviewed and assigned to appropriate sessions. Notification on acceptance will be sent to the corresponding author by email on 1 February 2024 for oral presentation and 1 March 2024 for poster presentation. The conference will be held in English.

You are invited to contribute papers in one or more of the Main Areas (MA) listed below. Before preparing and submitting abstracts, please review the MAs you are interested in and learn about the scope of each MA and the topics it covers.

Please consider the following special notes:

- Ethics as an overarching topic is relevant to many MAs, ranging from ethical foundations to the applications in specific areas of radiation protection (e.g., medicine, environment, emergency);
- Non-ionizing radiation (NIR) is fully integrated in the program and covered under various MAs, with MA8 addressing only practical applications;
- Abstracts on experience gained and lessons learned from preparedness for and responses to emerging diseases and from managing radiation protection in the context of geopolitical conflicts are encouraged, under relevant and appropriate MAs.

https://burkclients.com/IRPA/2024/site/call_for_papers.html

The Network for the Optimization of Occupational Radiological Protection in Latin America and the Caribbean (REPROLAM) is a scientific and cultural society, non-profit, political, religious or racial, of unlimited duration, whose objective is to promote the optimization of occupational radiological protection. REPROLAM seeks to expand academic and scientific cooperation among its members, with the aim of promoting adequate radiological protection for workers.

Visit our website for more information: <http://www.reprolam.com/>

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