

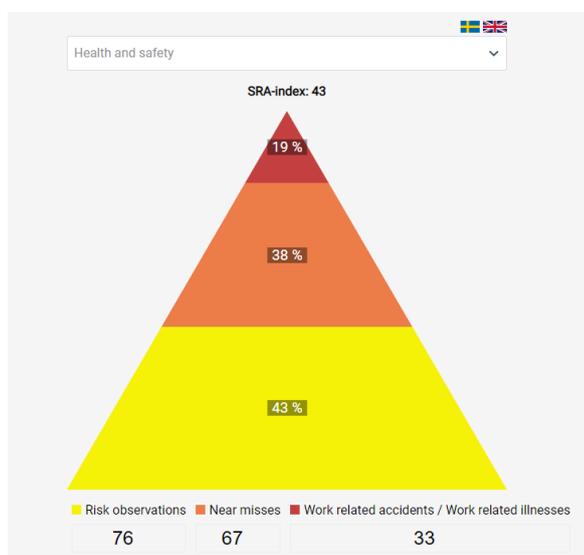


User manual for the key performance method SRA Index[©] och Risk Awareness Triangle[©]

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SRA Index – a key performance indicator for sustainable risk awareness related to the severity of reported work environment deviations

The risk awareness triangle – a visualization and calculation of the SRA Index



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Introduction

This manual describes how to calculate and visualize a key performance indicator for sustainable risk awareness in the work environment area, SRA Index. By calculating this index for sustainable risk awareness, one can get an indication of an organization's risk awareness and how this changes over time. The SRA Index is calculated using work environment deviations, taking into account the severity of the deviation types and their relationship. The types of deviations used are risk observations, near misses and occupational injuries (occupational injuries refer to occupational accidents and occupational diseases).

Background and purpose

Work-related injuries are a burden and lead to negative consequences for those injured, for organisations as well as for societies. Report, risk assess, analyse, and take action on deviations that can lead to occupational injuries is part of the companies' systematic work environment work. The SRA Index is a key performance indicator as an example of a standardized and easy-to-use way of calculating and presenting work environment deviations. By also reporting and managing risk observations in addition to incidents and occupational injuries, the risk of further occupational injuries is reduced.

The purpose of calculating the HRM index is to provide management teams with a decision basis that can be used to:

- justify early reporting and management of a risk to prevent injuries
- monitor the risk awareness in the organization over time as a basis for improvements
- compare the company's ARA Index with other companies.

The method for calculating and visualizing the SRA Index has been developed through literature studies and iterative development with experts, researchers, and management team members. The development has been inspired by the method for Sustainable employee engagement [1] and by Heinrich's theory of accident prevention and his "safety triangle" [2].

Calculation of SRA Index

The SRA Index is based on the number of risk observations in relation to the number of work environment deviations during a certain period of time for parts of or the entire organization. It is calculated as:

$$\text{SRA Index} = \frac{\text{Number of riskobservations}}{\text{Number of workenvironment deviations}} * 100$$

where the number of work environment deviations is the sum of the risk observations, near misses and occupational injuries (see Table 1 for explanations). The explanations are based on the Swedish Work Environment Authority's [3] and AFA's [4] definitions / explanations.

Table 1: Expressions used in the SRA Index and their explanations.

<i>Expression</i>	<i>Explanation</i>
Risk observation	means that an employee has identified a risk that could lead to a near miss or an accident/work-related illness.
Near miss	means that something has happened that could lead to an accident, but no injury occurs or a work-related illness, but no sick leave occurs.
Work related accident	means that something has happened at work that caused an injury to a person
Work related illness	means a disease caused by a harmful effect at work.
Injuries	the sum of work related accidents and work related illnesses
Work environment deviations	the sum of risk observations, near misses and injuries

The SRA Index is designed so that the lowest possible value is zero and the highest possible value is 100. A low SRA Index signals low risk awareness while a high SRA Index signals high risk awareness in an organization

The risk awareness triangle

The risk awareness triangle is used to calculate and visualize the SRA Index.

Development work is still in progress with the triangle. The current version of the risk awareness triangle is illustrated in Figure 1 with data from Praktikertjänst for 2020. The triangle does not state which period or organization is referred to. It is determined depending on where the SRA Index is presented. For example, this can be done in the company's sustainability report for one year, or in the company's quarterly report for management teams.

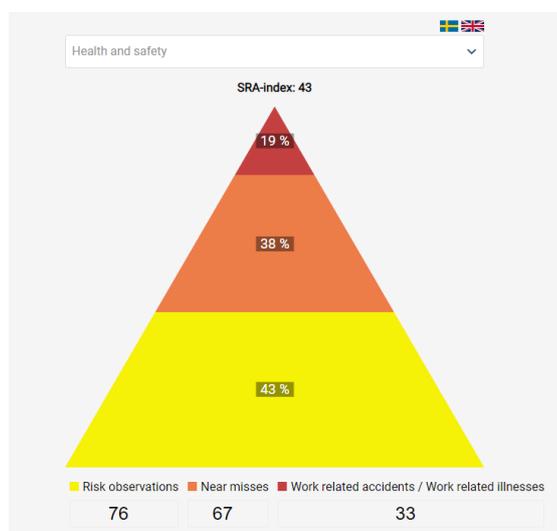


Fig. 1: Illustration of SRA Index[®] and The risk awareness triangle[®].

When using The risk awareness triangle, write the number of risk observations, near misses and occupational injuries that have been reported during a certain period of time in the text boxes below the triangle. In the example in Figure 1, there are 76 risk observations, 67 near misses and 33 occupational injuries. The SRA Index is indicated above the triangle. In the example, the SRA Index is = 43.

The risk awareness triangle is available by a link on KTH's website:

www.kth.se/sv/mth/ergonomi/forskning/sustainable-risk-awareness.

The SRA Index as a key performance indicator during a certain period of time

The SRA Index is designed so that it is possible to compare over a certain period of time and with other companies and industries' SRA Index. An example of what such a comparison might look like is shown in Figure 2, where the SRA Index for two industries and one company, based on data from the IA system [5], is illustrated.

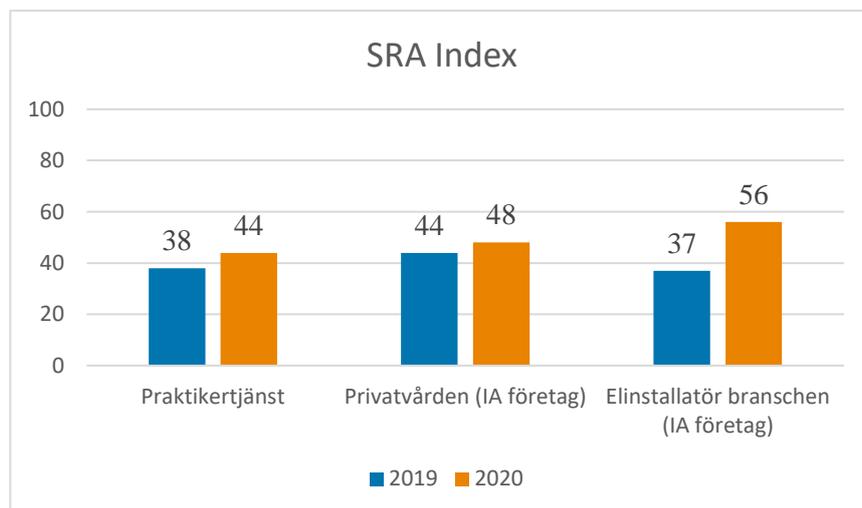


Fig. 2: Illustration of SRA Index for two industries and one company for 2019 and 2020.

More information

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