

Safety Culture

Paki

Figure Evaluation Pakistan Atomic En

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Reactors of sion

Introduction:

In PAEC, the safety culture is the integral part of the organization. PAEC has been promoting safety culture throughout the organization by implementing safety culture programs. In addition to safety culture, PAEC is also participating in various international activities related to safety culture, IAEA regarding safety culture. PAEC and the National Nuclear Regulatory Commission (NNRC) are also arranging workshops and seminars. PAEC is also interacting with IAEA missions to enhance its safety culture. PAEC is also conducting training sessions/ lectures on safety culture evaluation and enhancement of safety culture programs. PAEC is also conducting interviews of employees, group discussions, and focus group discussions. Safety culture was done by using standard evaluation methods. PAEC is also conducting evaluation of organizational artifacts, claimed that safety culture lines were sought out from the technical documents. PAEC is also conducting TECDOC-1321. PAEC mission and policy statement. After the Fukushima Dai-ichi accident, PAEC

part of management system which not only promotes it also enhances its significance. To strengthen the a number of international and regional meetings of national regulator Pakistan Nuclear Regulatory Authority, peer reviews, sharing operational experiences and capabilities in the field of safety culture. In this regard, evaluation are normally conducted in PAEC for awareness program. The evaluation results are based on observations, surveys and documents. The evaluation of safety models which mainly focus on the safety culture values and basic assumptions. In this regard, guidelines of IAEA i.e. IAEA-TECDOC-743 and IAEA statements reflect its commitments towards Safety Culture. Pakistan has put more emphasis on safe operation and

Questionnaires:

Specific questionnaires have been developed for each of the areas under mentioned for reference:

- 1.What about your confidence level if near misses are reported to you?
- 2.Do you know how your organization compares with others?
- 3.How you select your technical & administrative team?
- 4.What major types of interdepartmental issues raise concern?
- 5.Do you employees interact with foreign/national experts?
- 6.What type of committee you have formed to resolve issues?
- 7.Did your employees interacted with foreign/national experts?
- 8.What qualities/skill your successor possesses/should have?
- 9.What you think who will be your successor & why?
- 10 How do you praise good practices & challenge poor practices?

each sub-trait. Some of the sample questions are

and a larger number of minor events are reported

other establishments in terms of safety culture?

m?

d during the last year?

port in last year?

e technical & administrative matter?

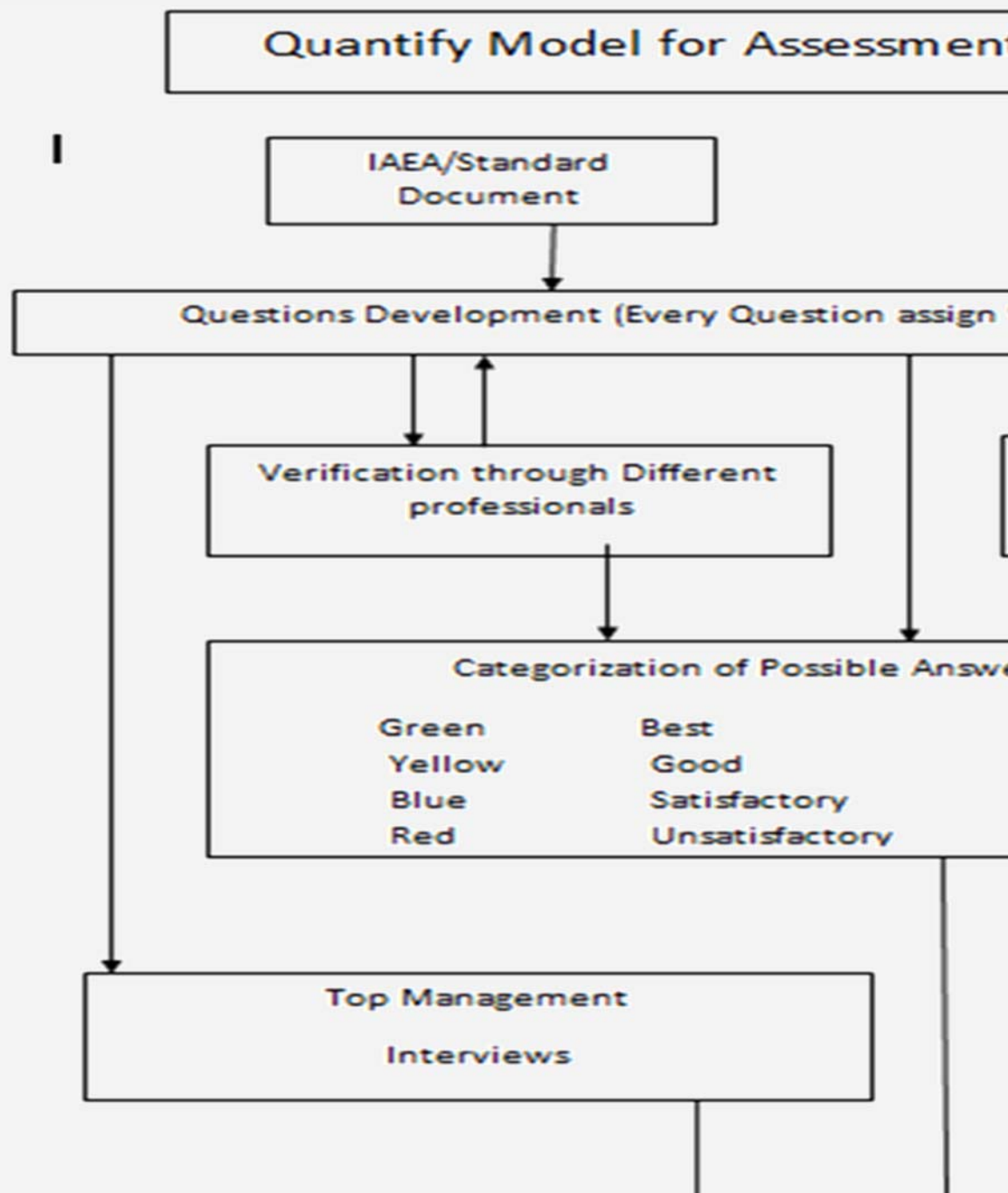
l experts in last year?

have?

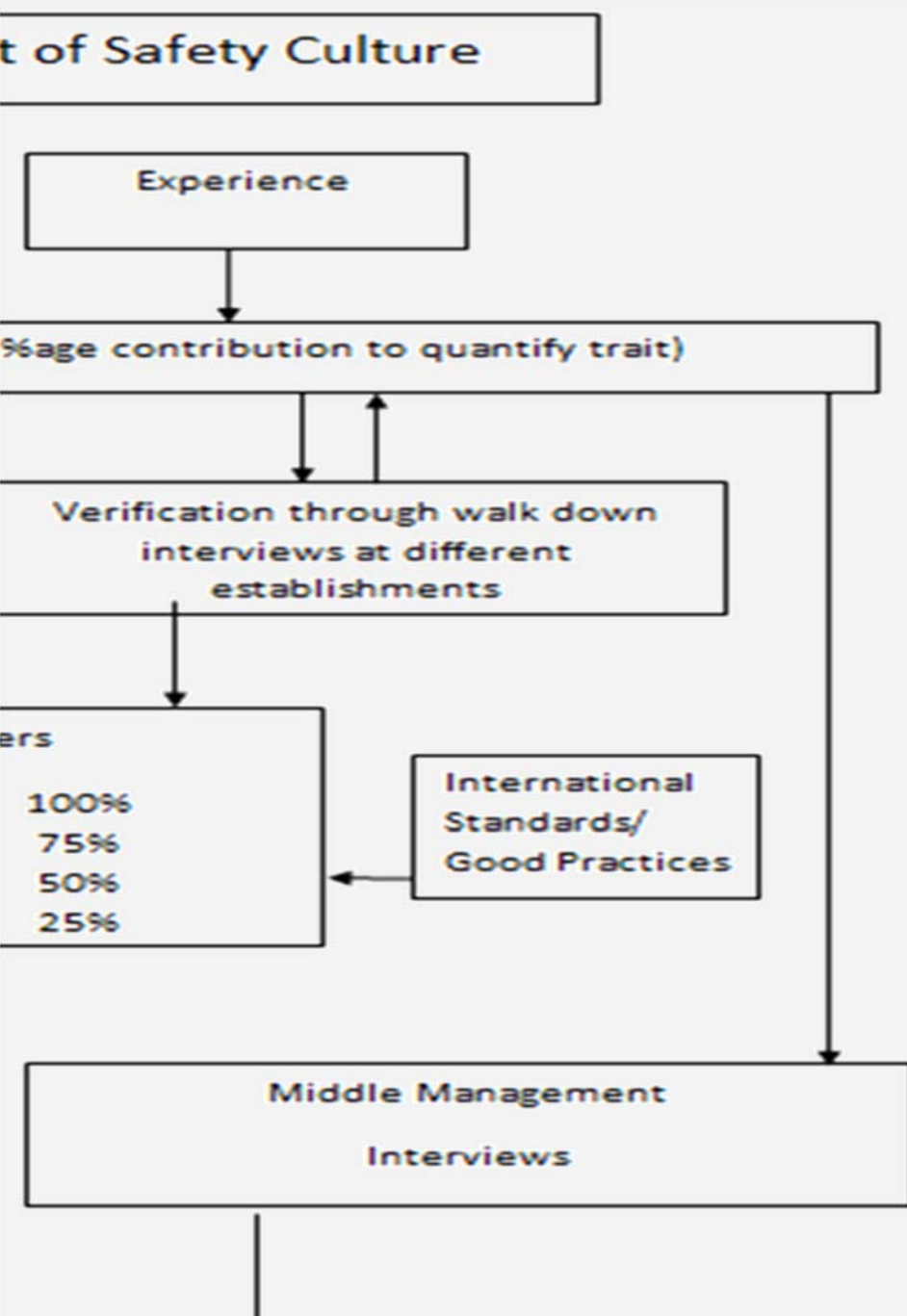
or one?

stringent control on safe usage of nuclear tech
can strengthen this control on nuclear techn
with the evaluation of safety culture in research
provide a feedback mechanism to review and r

Quantification Model:



technology. Development and evaluation of safety culture
ology. We intend to tread on the same path starting
ch reactors of Pakistan. The evaluation strategies will
revitalize the implementation of safety culture.



10. How do you praise good practices & challenge poor ones?
11. Do you have the process/method to ensure that the staff are aware of the standards before you so that you can make sound decisions?
12. Do you have adequate resources available to implement the standards that have been agreed upon?
13. Have you conducted peer review & root cause analysis?
14. How do you encourage and guide your staff, workers, and contractors to enhance safety?
15. How do you rate your organization as a place to work?

Case Study & Results:

Interviews from eleven personnel (top and middle management) were conducted. Reactors (PARR-I and PARR-II) were conducted. The evaluation strategy mentioned above for each personnel. The results of the evaluation of that particular sub-trait of said organization are the key parameter for exercising the good safety culture.

er one:

the correct information about safety issues is be-

lement the improvements on which management

analysis?

orking in teams, to think about how you can en-

work today compared with two years ago?

dle management) of Pakistan Research

The answers were marked as per the

accumulative results were assumed for

ganization. The sub-trait 'Knowledge' is

ture. This sub-trait is further divided into

In this paper the model to assess the safety of most of the organization in the subcontinent uses a control. Role of management imparts major bureaucratic style organization. The fundamental basis of sub traits. For example the fundamental divided into four sub-traits i.e. Knowledge, Safety culture and its measurement. Knowledge, Knowledge internalization, Training and management. Knowledge and Safety Policy Development of middle and top management while Implementation were used to assess the actions of said tier of management have equal importance (25% weightage each). Knowledge assessed by subject & objective methods. In this evaluation for said trait. The mentioned traits are assessed through set of questioners (Direct, Inverse and

culture has been presented with the view that
s the bureaucratic model for their administra-
r role in developing the safety culture of bu-
traits of safety culture are evaluated on the
l sub-trait 'Leadership Actions and Values' is
fety policy development, implementation of
edge is further divided into management
& skill enhancement and Succession man-
ment were used to assess the Safety values
tation of safety culture and its measurement
management. The mentioned four sub-traits
Assessment of said fundamental trait can be
s study, subjective method is considered for
and sub-traits were assessed for interviews
(Implied). For the development of questions.

management knowledge, Knowledge internalization
cession management. Total of 23 questions were
show that the organization is good in respect of Ma
in Knowledge internalization that may lead to unsat
sub-trait 'Safety Policy Development' assessment is
should know the mandatory features that must be
that have to face for the development of an effective
ment of safety policy requires that it will be 'imple
measure techniques help to counter the shortcomin
In order to evaluate the said sub traits the total of
personal of the Pakistan Research Reactors. Below
tained as the outcome of interviews from above said



, Training & skill enhancement and Suc-
e asked from the interviewees. Results
management knowledge. However it lacks
atisfactory succession management. The
essential in regard that the organization
included and the pragmatic challenges
ve Safety Policy. The effective develop-
mented' & 'measured' accordingly. The
g thus enhance the good safety culture.
thirty questions were asked by the said
w is the detail of cumulative results ob-
personal.



following methodologies were adopted: (1) Walk
als (3) IAEA Guidelines & Tec Docs. The Direct
its relevant category. Implied questions were giv
en 25-30% weightage. The interviews were conc
Diversified answers against each question were
fied in to four different categories i.e; green (10
marks) and red (0-25% marks). The weightage
the international standard.

down interviews (2) Feedback of profession-
t questions were given 10-15% weightage of
en 20-25 % and Inverse questions were giv-
ducted in four different PAEC establishments.
e received. These answers were than classi-
0% marks), yellow (75% marks), blue (50%
assigned to these categories is according to

