THE PSYCHOLOGICAL ASPECT OF SAFETY CULTURE: APPLICATION OF THE THEORY OF GENERATIONS FOR THE FORMATION OF SAFETY CULTURE AMONG PERSONNEL

PROF. TATIANA MELNITCKAIA
<table>
<thead>
<tr>
<th>Affiliation</th>
<th>Activity</th>
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<tbody>
<tr>
<td><strong>Leading specialist, Central Institute for Continuing Education and Training</strong></td>
<td>Development of programs and carrying out training for NPP managers and personnel of Rosatom enterprises for psychological aspects of formation of safety culture</td>
</tr>
<tr>
<td><strong>Prof. of Psychology Department, Obninsk Institute for Nuclear Power Engineering</strong></td>
<td>Professional development of top and middle NPP management, training of psychology students</td>
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<tr>
<td><strong>Leading researcher, Federal State Institution «All-Russian research institute on problems of civil defense and emergencies of Ministry of Emergencies of Russia»</strong></td>
<td>Ways, methods and organization of work on formation of life safety culture of population living in the contaminated areas.</td>
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</table>
The formation of safety culture is an attempt of constructive influence on the socio-psychological atmosphere of the team and the behaviour of employees.

The theory of generations developed by the American scientists (N. Howe, W. Strauss) helps in the analysis and consideration of the staff values formed under the influence of many factors, depending on the age of employees, in the course of safety culture formation.
STAGES OF SAFETY CULTURE DEVELOPMENT

According to the IAEA INSAG-15 Report, three stages can be identified in the development of safety culture.
STAGES OF SAFETY CULTURE DEVELOPMENT

1 STAGE
Based on rules

2 STAGE
Based on the purposes

3 STAGE
Based on improvement
Knowledge of the peculiarities of work with the representatives of various generations is also the manager’s resource when fostering the new values among the personnel, which are relevant to a higher safety culture level.
The theory of generations was developed by the American scientists N. Howe and W. Strauss (Generations: The History of America’s Future), 1991.

For Russia in 2003-2004 the theory of generations was adapted by team of experts under the leadership of Evgenia Shamis.
GENERATION –

is defined as the aggregate of people born over a particular span, who experienced an influence of the same events and parenting traits, with similar values.
POSTULATES OF THE THEORY OF GENERATIONS:

1. Belonging to a generation is based on the common values.
2. The theory of generations is applicable to the middle class.
3. The generations are covering several different stages.
THREE GROUPS OF VALUES:

- UNIVERSAL
- GROUP
- PERSONAL
VALUES FORMATION

EXTERNAL FACTORS:

Cultural, political, economic, social, technological and a parenting style.

Many values are fostered before **12-14 years** of age.
BIOLOGICAL LAWS OF ASSIMILATION OF INFORMATION (1)
(BRUCE H. LIPTON, ”The Biology of Belief”, 2007)

Up to the age of 2 years in the brain activity of children delta waves predominate, and with the use of them the ability of a child to imprint in his memory an incredible amount of information is ensured. At the age of 2 to 6 years the electrical brain activity of higher frequency starts predominating — theta waves.
Since the age of 12 or so in the protracted periods when the frequency is still high, the so-called beta and alpha wave activity can be observed and ability to assimilate information reduces drastically.
THE DYNAMIC DUO: the conscious and the subconscious

The unconsciousness is processing about 20 million of external stimuli per second.
The consciousness is able to process only 40 stimuli per second.
CURRENTLY THREE AGE-DIVERSE GENERATIONS ARE ACTIVELY WORKING AT THE RUSSIAN ENTERPRISES

<table>
<thead>
<tr>
<th>Generation</th>
<th>2015</th>
<th>2025</th>
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<tbody>
<tr>
<td>Baby Boomers Generation (1944-1963 years of birth)</td>
<td>26 %</td>
<td>8 %</td>
</tr>
<tr>
<td>“X” Generation (1964-1983 years of birth)</td>
<td>45 %</td>
<td>39 %</td>
</tr>
<tr>
<td>“Y” Generation (1984-2003 years of birth)</td>
<td>29 %</td>
<td>51 %</td>
</tr>
<tr>
<td>“Z” Generation (2004-2023 years of birth)</td>
<td>-</td>
<td>4 %</td>
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THE EXTERNAL CONDITIONS OF FORMATION THE BABY BOOMERS GENERATION

- baby boom,
- space exploration,
- USSR is the world superpower,
- the “cold war”,
- lines and coupons,
- common educational standards at schools,
- medical care security
- etc.
Baby Boomers
(1944-1963 years of birth)

Values

- Cult of youth
- Responsibility
- Commitment to personal growth, striving to lead
- Personal reward and status
- Collectivism, Team spirit

Recommendations how to motivate

- Propose to share the experience in the area of safety culture, act as mentors for the young adults.
- Emphasize, that the work on safety culture assumes a great responsibility.
- Provide access to the up-to-date information, latest news on safety culture.
- Stimulate by letters of appreciation, rewards, plaques etc.
- It is important to place emphasis on their authority.
- For winning Baby Boomer’s confidence it is essential to become understandable as a human being, as a personality. It means you should speak about yourself, your plans, and your values.
THE CONDITIONS OF “X” GENERATION CONSTRUCTION

• continuation of the “cold war”,
• perestroika,
• the war in Afghanistan,
• drugs,
• AIDS.
**THE GENERATION “X”**  
*(1963-1983 years of birth)*

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<tr>
<th>Values</th>
<th>Recommendations how to motivate</th>
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<tr>
<td>✓ Pragmatism.</td>
<td>✓ Elucidate the sense of the target, goal, certain activity and what it implies.</td>
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<tr>
<td>✓ Existence and understanding of the rationale.</td>
<td>✓ Clarify why reaching this goal is important for the employee himself, indicate its benefit.</td>
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<tr>
<td>✓ Individualism (self-reliance).</td>
<td>✓ Demonstrate prospects for advancement, career development.</td>
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<td>✓ Liberty.</td>
<td>✓ Get them involved in a few projects at a time, give a chance to choose where they prefer to</td>
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<td>✓ Readiness for changes (one step ahead).</td>
<td>participate.</td>
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<td>✓ Global information awareness.</td>
<td>✓ Focus on self-study of new skills required for safety culture development.</td>
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<tr>
<td>✓ Technical and computer competence.</td>
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<tr>
<td>✓ Life-long learning (one step ahead).</td>
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THE CONDITIONS OF “Y” GENERATION CONSTRUCTION:

• breakup of the Soviet Union,
• terroristic acts and military conflicts,
• crisis of 2008,
• mobile telephones and internet,
• branding era.
# The Generation “Y”
(1984-2003 years of birth)

## Values
- Individualism.
- Submission.
- Interesting work and comfort.
- Computer addiction.
- Immediate reward.
- Training.
- Competition and perspective.

## Recommendations how to motivate
- They need an experienced mentor.
- It is necessary to split up the goals set for the employees. And it is still better, if the leader assigns the tasks for a week and sometimes for a day and keeps track of the employee’s performance together with the employee.
- It is important to hold dialogues with them through social networking websites (SC blogs).
- Need in the immediate reward – for specific achievements, for the results in safety culture.
- Get the “cult figures” of the industry involved – as opinion leaders.
• The behavior of other people is accounted from the standpoint of our own values;
• The same words have different meanings and sometimes do not agree with the visual patterns;
• We often suggest to others what we consider good for ourselves.
Perspectives to application of the theory of generations for the formation of safety culture among personnel

- The peculiarities of feedback provision for multi-generational employees
- Technologies of work of the manager with the uneven-age personnel when forming special social and psychological climate in NPP divisions
- The issues of the organization of training process taking into account the age of the trainees
CONCLUSIONS

1. It is essential to assess the current level of safety culture at the NPP and foster values and beliefs relevant to the subsequent higher stage of safety culture development among the managers and then the personnel, thus realizing that the practical development of safety culture principles is a complex process, where one can hardly rely on making uniform and universal rules and recommendations.

2. For the effective management of age-diverse personnel the leaders need to understand how to communicate with a certain employee with regard to their/his values and beliefs that will allow the problems of intergenerational interaction to be minimized.

3. When fostering more progressive organizational norms and values among the personnel, it should be taken into considerations how they correlate with the real-world beliefs and values of different generations.
Thank you for your attention!