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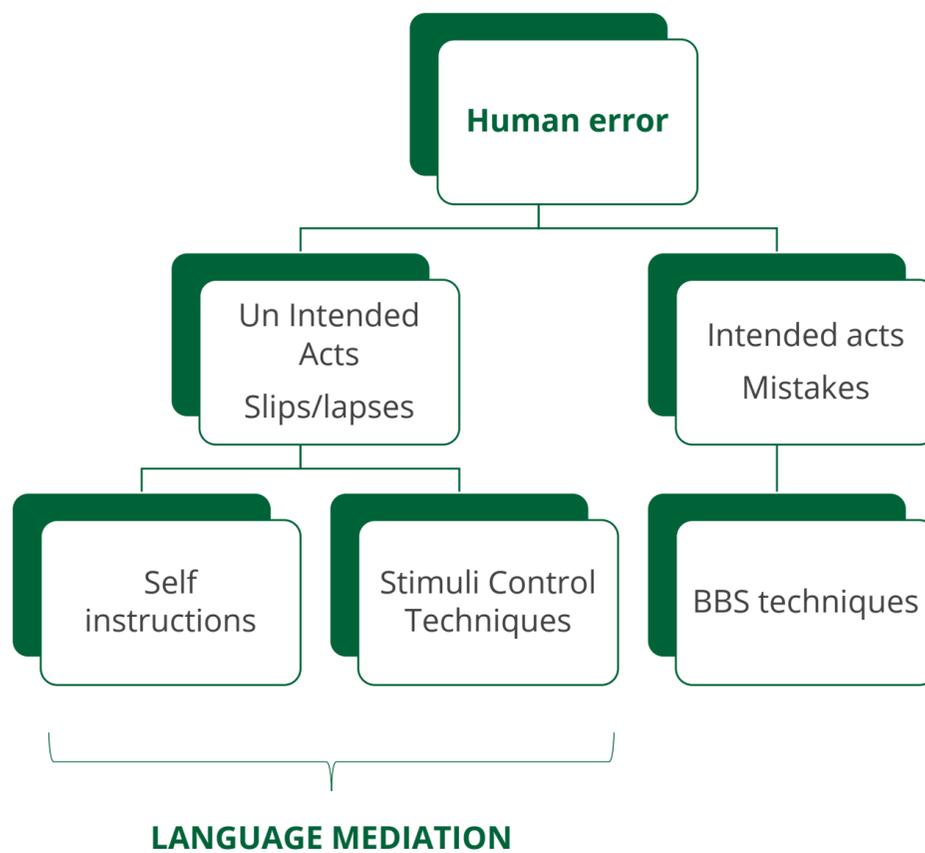
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HUMAN ERROR AND SELF-CONTROL TECHNIQUES

Our thesis is that an inadequate balance between the use of intuitive or quick thinking (System 1) and slow or analytical thinking (System 2) is at the root of skill errors and that, at the same time, self-control techniques can be useful techniques for its prevention.



1. Stimulus control techniques

Change of stimuli: We are referring to change the way of understanding the information coming from the environment, instead of as signals, activators of intuitive thinking, as signs or symbols, activators of analytical or scientific thinking, through the mediation of language.

2. Self instructional training

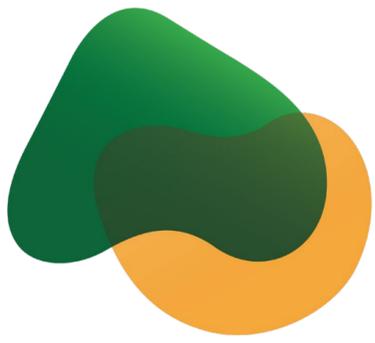
Self-instructions will be that technique that will allow us to inhibit this type of thinking that is triggered automatically causing errors.



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INTERNATIONAL RAILWAY SAFETY COUNCIL

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TRAINING SELF-INSTRUCTIONS METHODOLOGY

1. Detection of critical situations with Critical tasks Matrix (Self-observation)

CONSEQUENCES	HIGH				<table border="1"> <tr><td style="background-color: red;">HIGH PRIORITY</td></tr> <tr><td style="background-color: yellow;">MEDIUM PRIORITY</td></tr> <tr><td style="background-color: green;">LOW PRIORITY</td></tr> </table>	HIGH PRIORITY	MEDIUM PRIORITY	LOW PRIORITY
	HIGH PRIORITY							
	MEDIUM PRIORITY							
	LOW PRIORITY							
	MEDIUM							
LOW								
	LOW	MEDIUM	HIGH					
LEVEL OF HUMAN INTERVENTION								

2. Assessment of the critical situation according to taxonomy.

- Low priority.
- Medium priority.
- High priority.

3. Determine the message what should be said out loud and how to do it. (change the internal instructions that leading to the response)

CONSEQUENCES	HIGH	"KNOWN"	READING ALOUD	READING ALOUD	<table border="1"> <tr><td style="background-color: red;">HIGH PRIORITY</td></tr> <tr><td style="background-color: yellow;">MEDIUM PRIORITY</td></tr> <tr><td style="background-color: green;">LOW PRIORITY</td></tr> </table>	HIGH PRIORITY	MEDIUM PRIORITY	LOW PRIORITY
	HIGH PRIORITY							
	MEDIUM PRIORITY							
	LOW PRIORITY							
	MEDIUM	NOT REQUIRED	"KNOWN"	READING ALOUD				
LOW	NOT REQUIRED	NOT REQUIRED	"KNOWN"					
	LOW	MEDIUM	HIGH					
HUMAN INTERVENTION LEVEL								

4. Proceed to read it or speak it aloud according to the matrix:

- Read directly the procedure (Procedure in hand).
- Include voice recognition system in the software.

5. Reinforcement of behaviors:

- Positive reinforcement when new behaviors achieve desired responses.



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