Q1. Were the actions as intended?
Q2. Were the consequences intended?
Q3. Were unauthorized substances used?
Q4. Was there a medical condition?
Q5. Were there medical restrictions on the employee?
Q6. Were restrictions clearly communicated and understood?
Q7. Did the employee knowingly violate expectations?
Q8. Were expectations reasonable, available, workable, intelligible, and correct?
Q9. Does the situation pass the substitution test?
Q10. Were there deficiencies in training, selection, assignment, or experience?
Q11. Does the employee have a history of human performance problems?
Q12. Was performance problem self-reported?
Guidance for Using the Culpability Decision Tree

This guideline provides instructions for evaluating human performance in cases where individual culpability for certain behavior is not clear. The Culpability Decision Tree (Attachment A) is a tool that may be used in the investigation and analysis of an event that involved behavior that deviated from that which was expected. Once facts and first-hand information have been obtained from the individual or individuals involved (by means of interviews, critique, etc.), this tool can be used to understand the mindset of the personnel involved, the context of the situation, and the systemic and organizational influences that may have affected their decisions and resultant behavior.

Definitions

*Behavior* – a human act or sequence of human actions. Behavior consists of a plan or intention (a goal plus the means to achieve it), a sequence of actions initiated by the plan, and the extent of success in achieving the goal as each action is performed.

*Consequences* – the final, overall effect(s) or outcome(s) of an individual’s behavior with respect to the situation or environment in which the behavior occurred.

*Culpability* – the amount of blameworthiness that an individual’s behavior merits based on the nature of the deviation from expected behavior, the outcomes of the deviation, and the responsibility and authority of that individual, in the context of the situation in which the behavior occurred.

*Error* – an unintentional deviation from expected behavior.

*Knowledge-based Error* – an error associated with behavior in response to a totally unfamiliar situation (no skill, rule or pattern recognizable to the individual). Usually arises as a problem-solving situation that relies on personal understanding and knowledge of the system, the system’s present state, and the scientific principles and fundamental theory related to the system. In terms of failing to achieve the intended goal, actions conformed to the plan, but the plan was inadequate to achieve its intended outcome due to an inaccurate mental picture.

*Performance* – the behavior of an individual or group of individuals plus the *results* of that behavior, considered as a whole. (If the behavior under evaluation involves multiple individuals acting together as a team, their performance as a single unit should also be evaluated in addition to that of individual members of the team.)

*Performance Mode* – the manner in which a person acts in terms of information processing when executing a task or activity. The three performance modes are skill-based, rule-based and knowledge-based.

*Results* – the final outcomes of behavior strictly in terms of success or failure in achieving the intended goal, irrespective of the correctness or accuracy of risk perception on the part of the individual(s) involved.

*Rule-based Error* – an error associated with behavior based on selection of stored rules derived from one’s recognition of the situation; it follows an *If* (symptom X) / *Then* (situation Y) logic. In terms of failing to achieve the intended goal, actions conformed to the plan, but the plan was inadequate to achieve its intended outcome due to misinterpretation.

*Sabotage* – behavior in which both the act and the damaging outcome were intentional.

*Skill-based Error* – an error associated with highly-practiced actions in a familiar situation usually executed from memory without significant conscious thought or with little attention. In terms of failing to achieve the intended goal, the plan was adequate, but the action(s) failed to go as planned.
Violation – the intentional deviation from expected behavior as specified in operational procedures, rules, or standards, but in which the consequences were not intended.

Questions

Q1. Were the actions as intended?

At this point you are only concerned about behavior. In order to answer this question, as the evaluator you must know:

a. the actions being evaluated
b. the goal and how those actions related to the goal
c. the degree of success the individual had in executing the actions he/she planned to execute

No – the behavior is almost certainly an error, since what he/she did is not what he/she intended to do. It could very well have been a skill-based error, which Reason calls “the least blameworthy of errors,” but further evaluation of the behavior is still needed.

If the answer is ‘Yes,’ you need to more completely describe the behavior and what the outcomes of that behavior were.

Q2. Were the consequences intended?

In order to answer this question, as the evaluator you need to know:

a. the planned actions intended to achieve the goal
b. how successful the actions were in achieving the goal
c. the expected outcomes
d. the actual outcomes (i.e. results)
e. the other outcomes that occurred, and if they were considered/conceived of by the individual

Even though item “e” above relates the most to consequences, it is important to have as much insight into the individual’s actions as possible in order to fully evaluate his/her behavior.

No – the error was most likely a mistake or (possibly) a violation. This case is likely to be a rule- or knowledge-based error. Continue to the next branch of the tree.

Yes – go to conclusion C1.

Q3. Were unauthorized substances used?

The purpose of this question is to establish whether or not the individual was under the influence of alcohol or drugs known to impair performance at the time the actions were committed.

Q4. Was there a medical condition?

This question prompts you to determine if there was an actual medical condition that precipitated the individual using/taking the substance, albeit without authorization.

Q5. Were there medical restrictions on the employee?

If a medical condition had been reported to and acknowledged by the company, then there may have been medical restrictions imposed on the employee’s job duties and tasks.

Q6. Were restrictions clearly communicated and understood?
If medical restrictions were in place, this follow-up question seeks to determine how well those restrictions were communicated to the employee and if they were understood by the employee.

**Yes** – the employee disregarded the medical restrictions (C4).

**No** – the violation of the medical restrictions was system-induced (C5). So, further evaluation about the violation is warranted. Jump to Q9 (as indicated by the dashed line).

**Q7. Did the employee knowingly violate expectations?**

If it is established that the individual was aware of the expectations, but consciously elected not to conform to those expectations, then the answer would be ‘Yes.’

**No** – proceed to question Q9 on the next branch of the tree.

**Yes** – proceed to question Q8 below on the same branch of the tree.

**Q8. Were expectations reasonable, available, workable, intelligible, and correct?**

To answer this question, you may need to obtain feedback from the supervisor or even other employees who perform the same task or have similar duties.

**No** – the violation was induced by organizational weaknesses. Nevertheless, because the deviation was intentional, you should compare the individual’s behavior to that of peers. Therefore, jump to Q9 on the next branch of the tree (as indicated by the dashed line).

**Yes** – the problem lies more with the individual. However, further evaluation may still be warranted before drawing a final conclusion about the violation. Jump to Q9 (as indicated by the dashed line).

**Q9. Does the situation pass the substitution test?**

Could have (or has) some well-motivated, equally competent and comparably qualified individual behaved differently under those or very similar circumstances? The answer to this question will probably need to be obtained from “peers” in a manner and environment that will yield frank and honest responses. This question will indicate if violations are condoned and/or have become routine.

**Yes** – the situation passes the test.

**No** – the situation does not pass the test, and the person should not be individually blamed.

<table>
<thead>
<tr>
<th>Previous Point on Tree</th>
<th>Conclusion / Path Forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>From ‘No’ to Q7, i.e. the employee did not knowingly violate expectations.</td>
<td>Interim conclusion: This was an error. So, if:</td>
</tr>
<tr>
<td></td>
<td>‘Yes’ (passed substitution test)</td>
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<tr>
<td></td>
<td>then proceed right to the next branch of the tree as indicated.</td>
</tr>
<tr>
<td>From C6 – possible reckless violation</td>
<td>Interim conclusion: This was not an error, but a violation. So, if:</td>
</tr>
<tr>
<td></td>
<td>‘Yes’ (passed substitution test)</td>
</tr>
<tr>
<td>Previous Point on Tree</td>
<td>Conclusion / Path Forward</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Stop.</td>
<td>This was not a reckless violation. Conclusion: This must have been system-induced. Stop. Use causal analysis to determine systemic/organizational causes that prompted or influenced the violation.</td>
</tr>
<tr>
<td>From C5 – system-induced violation (of medical restrictions)</td>
<td>Conclusion: This was a system-induced violation. However, if:</td>
</tr>
<tr>
<td>‘Yes’ (passed substitution test)</td>
<td>‘No’ (failed substitution test)</td>
</tr>
<tr>
<td>Stop.</td>
<td>Stop. Causal analysis should be used to determine the causes associated with medical restrictions that prompted or influenced the violation. Any required disciplinary or corrective action toward the individual should take into account that peers would probably not have acted differently in the same situation.</td>
</tr>
<tr>
<td>From C7 – system-induced violation (of adequate expectations)</td>
<td>Conclusion: This was a system-induced violation. However, if:</td>
</tr>
<tr>
<td>‘Yes’ (passed substitution test)</td>
<td>‘No’ (failed substitution test)</td>
</tr>
<tr>
<td>Stop.</td>
<td>Stop. Causal analysis should be used to determine the type of violation (routine, optimizing or necessary) and the systemic causes that prompted, or influenced the violation. Any required disciplinary or corrective action toward the individual should take into account that peers would probably not have acted differently in the same situation.</td>
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Q10. **Were there deficiencies in training, selection, assignment, or experience?**

*Training* provides workers the appropriate behavioral skills, related knowledge, and attitudes needed to perform their job duties. *Selection and assignment* refer to considerations and processes used to hire
people and assign them specific responsibilities and on-the-job tasks. Experience is knowledge, skill or practice derived from direct observation of or participation in events.

**No** – Go to conclusion C8, and use the information about peers gathered for the substitution test in order to determine if the error was indeed attributable, at least in part, to negligence on the part of the individual.

**Yes** – Go to conclusion C9. Subsequent analysis should be directed at the specific deficiency in order to determine systemic causes.

**Q11. Does the employee have a history of human performance problems?**

Have there been any previous instances where the individual had this performance problem?

**Q12. Was the performance problem self-reported?**

Self-reporting can be in the form of the individual notifying management of an error, or if the individual acknowledged that an error was made when it was identified or pointed out by a supervisor or co-worker.

**Conclusions**

C1. *Intentional act* (not an error) – this was not an error; the behavior is possibly sabotage, malevolent damage, willful violation, etc.

C2. *Substance abuse without mitigation* – company procedures for dealing with instances of substance abuse should be initiated.

C3. *Substance abuse with mitigation* – company procedures for providing mitigation when dealing with instances of substance abuse should be initiated.

C4. *Disregard of medical restrictions* – company procedures for establishing and enforcing medical restrictions should be initiated.

C5. *System-induced violation* – this was a violation of medical restrictions that were not clearly communicated or understood by the employee. However, influences from the system on behavior also need to be evaluated.

C6. *Possible reckless violation* – If the situation passes the substitution test, this type of behavior is more culpable than system-induced violations because of reasonable and correct expectations were available and others (peers) would not have done the same thing in the same situation.

C7. *System-induced violation* – this was a violation that was induced by weaknesses in the system. You should see if the situation passes the substitution test, and then evaluate the system for influences on behavior.

C8. *Negligent error* – This is an appropriate conclusion if another person (peer) would have foreseen and avoided bringing about the consequence. It suggests more individual culpability than a system-induced error. Corrective action should seek to understand why the individual did not recognize the potential consequence and why he/she believed his/her behavior was appropriate for the situation.

C9. *System-induced error* – This was an error provoked by the system in which the individual was working. If there was a deficiency in selection and/or assignment, further analysis should focus on the hiring process. Deficiencies in training or experience should analyze the training and qualification process for the individual's job position. Other parts of the system should also be evaluated for related causes.
Attachment B

C10. **Blameless error with remediation** – this was an error. However, the behavior (or history of this type of behavior) may warrant some form of remediation to correct it. Determining the performance mode of the error (skill-, rule- or knowledge-based) will serve to indicate the appropriate training or form of remediation needed. Analysis of organizational processes and management/supervisory practices should also be conducted.

C11. **Blameless error** – this was an error; the individual should not be individually blamed. Analysis of organizational processes and management/supervisory practices should be conducted to identify conditions that provoked the error and weaknesses in the defenses that did not mitigate the consequences of the error.