GUIDE TWO

THE BRITANNIA GROUP WHITE PAPER

EMOTIONS, BIASES, AND DEFENCESTHE HIDDEN FACTORS IN DECISION-MAKING AT SEA





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INTRODUCTION 3

WELCOME TO THE SECOND GUIDE IN OUR SERIES, WHERE WE WILL UNRAVEL THE COMPLEXITIES OF THE HUMAN MIND IN THE CONTEXT OF SAFETY-CRITICAL DECISION-MAKING.

We delve into how innate cognitive biases and emotional factors influence our choices and explore the brain's inner workings that govern our actions. Our aim is to arm you with insights that can enhance decision-making processes and contribute to safer outcomes.

CASE EXAMPLE

FIRE ON BOARD

During the night, a smoke detection sensor in the engine room activates. The engine room is unmanned at the time.

The second officer on the bridge calls the master. By the time the master arrives at the bridge, several more fire and smoke sensors activate. It is clear there is a large fire in the engine room. Thick smoke appears from all openings. It is completely dark outside.

The general alarm sounds automatically (as fire sensors have been activated) and the crew gather at the muster station. The chief officer orders them to isolate the engine room and prepare the fire crew (put on protective clothing etc.)

Closing fire dampers is not easy, some of them have to be shut by hand and the fire is now so intense that in addition to smoke, live flames blow from the openings.

The only power is now available from the emergency generator. The ship has lost propulsion (engine stopped), some navigation devices stopped working (as it turned out, their power supply and some connections were damaged by fire). The ship is in coastal waters in high traffic.

At this stage, the master shows the first signs of trouble. There are many concurrent threads of action, and he is not a person who would ordinarily delegate. He begins to freeze whilst he is processing the situation. The crew act as they are trained and – knowing what they have to do and need the master to give the order to execute (as there are actions that should only happen on the master's order). Soon, several officers are unable to progress further because facing these multiple decisions, the master becomes completely unresponsive.

At this point, the chief and chief engineer collectively assume command. Based on the size of fire, they order all crew to evacuate the engine room and accommodation, and after the head count is complete, they send the fire crew to release the fixed CO2 to extinguish the fire in the sealed engine room.

In the hours and days following this incident, the master is furious, and he decides to accuse officers of acting without order and not in accordance with the procedure. This has its final in the maritime court, when during proceedings the master positioned himself in the role of the accuser. However, the court recognised the officers' actions were correct and effectively saved the ship from becoming a total loss.

The decision-making in this scenario was influenced by psychological factors such as cognitive load, stress, social dynamics, training, self-perception, and procedural constraints. These factors interacted in complex ways to influence the outcomes of the situation.

The situation required a departure from these norms, and the officers were later vindicated for doing so, highlighting the tension between following procedure and adapting to the unique circumstances of a crisis.

LET'S HAVE A CLOSER LOOK AT THE SITUATION.

COGNITIVE LOAD AND OVERWHELM

The master had to process an enormous amount of information and make quick decisions in a high-pressure environment. This increased cognitive load may have led to decision-making paralysis, a phenomenon where a person becomes unable to make decisions due to the overwhelming number of options and considerations.

STRESS AND FIGHT-OR-FLIGHT RESPONSE

Under extreme stress, the body's "fight-or-flight" response can be activated, leading to a focus on immediate threats and a narrowing of cognitive function. The master's stress level might have been so high that it interfered with his decision-making capabilities.

LACK OF DELEGATION

The master is described as not being someone who ordinarily delegates, which could create a bottleneck in decision-making. In a crisis situation, this tendency can be particularly harmful as it prevents the flow of actions needed to address the situation effectively.

TRAINING AND EXPERIENCE

The other officers and crew seemed well-trained and knew what needed to be done but were waiting for the master's approval for actions that traditionally require it. This shows the potential limitations of procedure and hierarchy in emergency situations, and the importance of adaptability.

SOCIAL DYNAMICS AND GROUP DECISION-MAKING

In the absence of effective leadership from the master, the chief officer and chief engineer stepped in and made collective decisions. This could be seen as an example of "emergent leadership," where leaders emerge based on the group's needs rather than established hierarchy.

ACCOUNTABILITY AND SELF-PERCEPTION

After the event, the master felt his authority was undermined. This may be influenced by cognitive dissonance, where the master's self-perception as an effective leader was threatened by the actions of the other officers, leading him to shift blame rather than trying to understand his own reactions.

PROCEDURAL AND NORMATIVE CONSTRAINTS

Both the master and the officers were operating under established maritime procedures, which prescribe who has the authority to make certain decisions. The situation required a departure from these norms, and the officers were later vindicated for doing so, highlighting the tension between following procedure and adapting to the unique circumstances of a crisis.

We will dive more into these aspects.

IN DECISION-MAKING,
PARTICULARLY IN HIGHSTAKES SETTINGS LIKE
OVERSEEING THE SAFETY
OF A MERCHANT SHIP,
UNDERSTANDING HOW
OUR MINDS WORK CAN BE
A LIFESAVER.

The human mind, for all its analytical prowess, is prone to certain biases that can influence our judgement in significant ways:

CONFIRMATION BIAS

This is a particularly common bias that makes us pay attention to information that confirms what we already believe and disregard information that challenges our preconceptions. For example, a ship captain planning a voyage might place undue emphasis on favourable weather reports while sidelining storm warnings. The consequence could be embarking on a risky route without adequately preparing for bad weather conditions.

AVAILABILITY HEURISTIC

Here, our judgement is shaped by what is immediately available to our memory. In a maritime context, a ship's crew might concentrate their safety measures on avoiding the kinds of accidents that have recently occurred, or those that were most talked about during their safety briefings. This may lead to neglecting other potential hazards that are less vivid but equally dangerous.

ANCHORING BIAS

This bias involves giving disproportionate weight to the first piece of information received, which can serve as an "anchor" for future decisions. For example, if a ship's management receives a high initial quote for upgrading safety equipment, this could skew their budget expectations and decision-making when evaluating other vendors, even if more cost-effective and equally reliable solutions are available.

OVERCONFIDENCE BIAS

With this bias, individuals tend to overestimate their own skills or the accuracy of their predictions. A pilot who has successfully navigated difficult routes in the past may become overconfident and underestimate new or different challenges, potentially overlooking essential safety precautions.

HINDSIGHT BIAS

This is a post-event bias where people think an event was more predictable after it has occurred. For instance, after a ship has run aground, the crew might believe they could have easily avoided the accident, underestimating the various factors like poor visibility and high winds that complicated the decision-making process at the time.

SUNK COST FALLACY

This occurs when individuals continue to invest in a failing course of action simply because they have already invested time, effort, or money. In a nautical setting, a chief engineer might continue attempts to repair a problematic engine despite contrary advice, based purely on the reasoning that a lot of time has already been invested in the repairs.

Being consciously aware of these biases is the first step towards safeguarding against them. It enables maritime professionals to introspectively evaluate their decision-making processes, consult more widely, and adhere to established protocols, thus enhancing the quality of their choices in crucial situations.

REFLECTION EXERCISE

EXPLORING COGNITIVE BIASES IN DECISION-MAKING

At your next safety group meeting on board, you may want to explore cognitive biases and their potential impact on decision-making. Encourage open discussions to foster a deeper understanding of how biases can influence choices in safety-critical situations.

OBJECTIVE

To raise awareness of cognitive biases and their potential influence on decision-making within the safety group on board, promoting a proactive approach to identify and mitigate biases.

INSTRUCTIONS

1. GATHER THE SAFETY GROUP

Assemble the safety group on board for the safety meeting. Ensure all relevant team members are present, including the captain, officers, crew members, and safety officers.

2. INTRODUCE THE TOPIC

Begin the meeting by briefly introducing the concept of cognitive biases and their relevance in decision-making. Mention that cognitive biases are natural tendencies that can influence our perceptions, judgments, and choices, even in safety-critical situations.

3. PRESENT THE EXAMPLES

Use the examples of cognitive biases previously discussed in the guide (e.g., confirmation bias, availability heuristic, anchoring bias, and overconfidence bias). Briefly explain each bias and how it can manifest in decision-making scenarios aboard the vessel.

4. GROUP DISCUSSION

Divide the safety group into smaller discussion groups, ideally with diverse roles and perspectives represented in each group. Assign one or two cognitive biases to each group.

5. REFLECT ON PAST EXPERIENCES

In their respective groups, encourage the participants to share instances or situations where they believe cognitive biases might have influenced safety decisions on board. It could be incidents, near-misses, or routine operational choices.

6. IDENTIFY MITIGATION STRATEGIES

Prompt the groups to brainstorm strategies for mitigating the impact of cognitive biases on decision-making. Encourage them to think about methods to counteract each specific bias and how to foster a culture of open communication and self-awareness.

7. GROUP PRESENTATIONS

After a designated discussion time, reconvene as a whole group. Ask each group to share their reflections and key insights from their discussions. Emphasise the importance of learning from past experiences and continuously improving safety practices.

8. OPEN DIALOGUE

Facilitate an open discussion where participants can ask questions, share further examples, or express their thoughts on the topic. Encourage an environment of trust and openness to promote valuable insights.

9. ACTION POINTS

Summarise the key takeaways and action points from the exercise. Discuss how the insights gained can be implemented to enhance safety practices and decision-making on board.

10. FOLLOW-UP

Encourage ongoing discussions on cognitive biases and decision-making in future safety meetings. Consider incorporating similar reflection exercises periodically to reinforce awareness and learning.

THE ROLE OF EMOTIONS IN DECISION-MAKING

EXPLORING THE SIGNIFICANCE OF EMOTIONS IN SHAPING DECISIONS

In safety-critical situations, decision-making is not purely a rational and logical process; emotions play a vital role in shaping how individuals perceive information, assess risks, and arrive at choices. Emotions can be powerful drivers of decision-making, either facilitating effective responses or introducing biases that may lead to suboptimal outcomes. Understanding the impact of emotions is essential for enhancing decision-making in high-pressure environments.

THE INFLUENCE OF EMOTIONS ON RISK PERCEPTION

Emotions can significantly influence how individuals perceive risks and potential outcomes. For example, fear and anxiety in emergency situations may heighten the perception of danger, leading to a more cautious approach. Conversely, overconfidence or excitement can cause individuals to underestimate risks, potentially compromising safety. Crew members' emotional states during critical moments can shape their risk assessments and, consequently, the decisions they make.

EXAMPLE

In adverse weather conditions, a vessel's crew may encounter conflicting emotions, such as concern for safety versus the urgency to reach the destination on time. The captain's emotional state can impact the decision-making process, affecting whether to proceed cautiously or push through despite potential risks.

INTUITIVE JUDGMENTS AND EMOTIONAL INTELLIGENCE

Emotions also play a pivotal role in intuitive judgments - rapid assessments made without conscious reasoning. Emotional intelligence, the ability to recognise, understand, and manage emotions in oneself and others, is essential in safety-critical decision-making. Crew members with high emotional intelligence tend to be better equipped to make quick yet well-informed decisions while considering the emotional states of their team members.

THE IMPACT OF STRESS AND FATIGUE

High-stress environments and fatigue can significantly influence emotional responses, leading to impaired decision-making. Crew members working under prolonged stress or fatigue may experience reduced cognitive abilities, hindering their capacity to make effective choices. Recognising the signs of stress and fatigue and implementing strategies to manage these factors are critical in ensuring sound decision-making.

EXAMPLE

After an extended period of challenging operations and lack of rest, crew members' emotional and cognitive functioning may be compromised. In such situations, decision-making can be adversely affected, warranting attention to crew well-being and the implementation of appropriate rest and recovery measures.

OTHER EXAMPLES HIGHLIGHTING THE IMPACT OF EMOTIONS ON DECISION-MAKING

- In a search and rescue operation, emotions such as hope and determination drive the crew to persistently search for survivors. Despite challenging conditions, the emotional commitment to the mission motivates them to continue their efforts diligently.
- After a long and tough operation, crew members might not be thinking clearly. This is a sign that they need a break to rest and recover.
- Being stressed or tired for a long time can mess with how we make decisions. It's crucial to spot the signs early and take steps to manage them.

EXAMPLE

THE EMOTIONAL STATE OF THE TEAM

Sometimes, it's not just one person's emotions that matter; the whole team's feelings can affect what decisions are made. Leaders should be aware of the group's emotional state and manage it effectively.

UNDERSTANDING PSYCHOLOGICAL DEFENCES IN DECISION-MAKING

In the realm of decisionmaking, our minds have
evolved complex psychological
defence mechanisms to protect
us from anxiety, discomfort,
and threatening information.
These defences are rooted in
our subconscious and arise in
response to perceived emotional
threats, often without conscious
awareness. While these
mechanisms serve a purpose
in shielding us from distress,
they can also influence our
perceptions and decisions.

Psychological defences are rooted in early life experiences and the process of socialisation. As we grow and interact with the world, we develop coping mechanisms to manage challenging emotions and situations. These defences are initially learned and applied in personal contexts, but they can also manifest in professional settings, including maritime operations.

PATTERNS AND IMPACT ON BEHAVIOUR

Psychological defences shape patterns in how we interpret, process, and respond to information. They can influence our decision-making by filtering incoming data through a lens that minimises emotional discomfort. This can lead to biased assessments of risks and consequences, distorting our ability to make fully objective and rational choices.

DENIAL AND AVOIDANCE

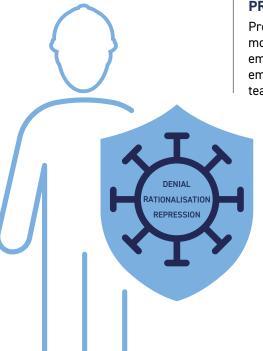
Denial is one of the most common defence mechanisms, where individuals refuse to acknowledge threatening or distressing information. In safety-critical situations, crew members may engage in denial to alleviate anxiety or fear, convincing themselves that potential risks are not as severe as they may seem. Avoidance is closely related to denial and involves consciously or unconsciously evading situations or information that triggers discomfort.

RATIONALISATION

Rationalisation involves creating logical explanations or justifications for decisions or actions that may have been influenced by emotions or biases. Crew members may unconsciously rationalise their choices to protect their self-image, reduce feelings of guilt, or downplay the significance of potential risks.

PROJECTION

Projection occurs when individuals attribute their own feelings, thoughts, or motives to others. In safety-critical scenarios, crew members may project their emotional responses onto their teammates, assuming others share the same emotional reactions. This projection can hinder effective communication and teamwork.



EXAMPLE

ILLUSTRATING PSYCHOLOGICAL DEFENCES IN MARITIME DECISION-MAKING

Imagine a ship engineer facing a complex technical issue during critical operations. Unconsciously, they might engage in denial, convincing them that the issue is minor and will not affect the vessel's performance. This defence mechanism shields them from the anxiety of dealing with a potentially significant problem. Consequently, they may delay reporting the issue to the rest of the crew, inadvertently placing the vessel and its occupants at risk.

THE ROLE OF EMOTIONS IN DECISION-MAKING (continued)

NAVIGATING PSYCHOLOGICAL DEFENCES FOR EFFECTIVE DECISION-MAKING

Recognising and addressing psychological defences is crucial for improving decision-making in safety-critical scenarios. Strategies to navigate these mechanisms include:

· SELF-REFLECTION

Taking the time to reflect on our emotional responses can aid us in comprehending these psychological defences. Examine your own tendencies in how you manage different scenarios.

TEAM TRAINING

Courses that help improve teamwork and problem-solving can make everyone more aware of how these defences affect their decisions.

PSYCHOLOGICAL SUPPORT AND DEBRIEFING

· GETTING PROFESSIONAL HELP

Talking to a counsellor or a psychologist can help us find better ways to cope with stress and make better decisions.

By delving into the origins and patterns of psychological defences, crew members can develop a deeper understanding of their decision-making processes and work towards making more 'objective' and informed choices in safety-critical situations.

REFLECT ON TIMES WHEN YOU HAD TO MAKE DIFFICULT CHOICES OR ENGAGE IN DIFFICULT DECISION-MAKING PROCESSES WITH OTHERS.

How were your decisions or engagement affected by emotions or psychological defences?

What could you do differently next time?

THE BRAIN'S SYSTEM 1, SYSTEM 2 & HABITS IN DECISION-MAKING

THE DUAL PROCESS THEORY

SYSTEM 1 & SYSTEM 2

In the realm of decision-making, our brains operate through two distinct but interconnected processes. These have been described by Daniel Kahnemann as System 1 and System 2. These two systems play critical roles in how we perceive, process information, and arrive at decisions. Understanding the characteristics and functions of System 1 and System 2 is essential for comprehending the dynamics of decision-making in safety-critical situations.



CHARACTERISTICS AND FUNCTIONS OF SYSTEM 1

System 1 is our brain's automatic, fast, and intuitive mode of thinking. It operates effortlessly and quickly, making it well-suited for routine tasks and familiar situations. Here are some key characteristics and functions of System 1:

1. RAPID PROCESSING

System 1 processes information swiftly and without conscious effort, enabling us to make quick judgments and responses.

2. PATTERN RECOGNITION

This system excels at recognising patterns based on prior experiences and stored knowledge. It helps us react effectively in situations we've encountered before.

3. ASSOCIATIVE THINKING

System 1 often works through associations, linking current stimuli with familiar concepts and emotions, which can influence our decision-making.

4. HEURISTICS

It relies on mental shortcuts and heuristics to simplify complex problems and arrive at efficient solutions.

5. UNCONSCIOUS INFLUENCES

System 1 can be influenced by cognitive biases, emotions, and habits without our awareness, shaping our decisions.

CHARACTERISTICS AND FUNCTIONS OF SYSTEM 2

System 2 is our brain's deliberate, slow, and analytical mode of thinking. It requires conscious effort and attention, making it suitable for complex problem-solving and critical analysis. Here are some key characteristics and functions of System 2:

1. CONSCIOUS EFFORT

System 2 requires conscious effort and attention to process information and arrive at decisions.

2. ANALYTICAL THINKING

It is engaged when we encounter unfamiliar or challenging situations that demand careful analysis and consideration of potential outcomes.

3. LOGIC AND REASONING

System 2 employs logical reasoning and critical thinking to evaluate information systematically.

4. COGNITIVE FLEXIBILITY

This system allows us to consider multiple perspectives and options before arriving at a decision.

5. OVERRIDING AUTOMATIC RESPONSES

System 2 can override the automatic responses of System 1 when necessary, helping us avoid impulsive or biased decisions.

THE BRAIN'S SYSTEM 1, SYSTEM 2 & HABITS (continued)

EXPERIENCE AND EXPERTISE IN DECISION-MAKING

A vital factor that influences the operation of System 1 and System 2 is the level of experience and expertise individuals possess. As individuals gain more experience in a particular domain, their brains become more adept at quickly recognising patterns and responding to familiar situations. In such cases, System 1 thinking becomes increasingly valuable.

Experienced professionals, such as maritime crew members with years of service, may rely on System 1 thinking to make efficient decisions in routine scenarios due to their accumulated knowledge and familiarity with the maritime environment. This reliance on System 1 can be highly beneficial, allowing for swift and accurate responses in everyday operations.

However, during unforeseen events, experience and expertise also contribute to the activation of System 2 thinking. Complex and unfamiliar situations often require deliberate analysis and careful consideration, even for seasoned professionals. The ability to shift from System 1 to System 2 thinking when necessary demonstrates the adaptive nature of decision-making.

PITFALLS

However, relying solely on System 1 thinking, even in experienced individuals, can lead to pitfalls in safety-critical situations. One potential pitfall is the risk of cognitive biases influencing decision-making. Experienced crew members may be susceptible to overconfidence bias, assuming their expertise shields them from errors or accidents. This overconfidence can lead to complacency and the overlooking of crucial safety considerations. System 1 is also prone to seeking information that confirms pre-existing beliefs (confirmation bias), which can be dangerous in critical situations where a more balanced view is essential.

There are also pitfalls for System 2 e.g. analysis paralysis. Because System 2 is analytical and slow, there's a risk of becoming bogged down in too many details, leading to decision-making delays. Also the risk of resource drain as System 2 thinking requires a lot of mental energy and concentration, which might not always be feasible during high-stress or emergency situations.

THE INTERPLAY BETWEEN SYSTEM 1 AND SYSTEM 2

During rare or unforeseen events, experience and expertise also contribute to the activation of System 2 thinking. Complex and unfamiliar situations often require deliberate analysis and careful consideration, even for seasoned professionals. The ability to shift from System 1 to System 2 thinking, when necessary, demonstrates the adaptive nature of decision-making.

Recognising when to rely on System 1 or System 2 is a skill that can be honed. Training methods such as real-world simulations and ongoing learning programs can help crew members become more aware of their thought processes, empowering them to make better decisions in varying situations. Mastering the balance between quick, intuitive thinking and slow, analytical reasoning is crucial for navigating safety-critical situations effectively.

In the following section, we will explore the role of habits in decision-making and how ingrained patterns of behaviour can influence choices in safety-critical environments.

THE BRAIN'S SYSTEM 1, SYSTEM 2 & HABITS (continued)

THE ROLE OF HABITS IN DECISION-MAKING

Habits are ingrained patterns of behaviour that we develop through repetition and reinforcement. These automatic routines play a crucial role in decision-making, particularly in safety-critical situations, where split-second actions can have significant consequences. Understanding the formation and influence of habits can help us navigate their impact on decision-making and promote adaptive behaviours.

Habits develop through a psychological framework known as the Cue-Routine-Reward loop. A "cue" triggers the habit, a "routine" is performed, and a "reward" reinforces the behaviour, making it more likely to occur again in the future. Understanding this loop can help in identifying and changing ingrained habits.

Habits develop through a process called habit formation, where actions become automatic responses to specific cues or triggers. The more frequently we engage in a particular behaviour in a specific context, the stronger the habit becomes. Once formed, habits reduce the cognitive load associated with decision-making, as they bypass deliberate thinking and rely on automatic responses. While this can be beneficial in routine tasks, it can also lead to challenges e.g., in dynamic and complex situations.

In safety-critical scenarios, the pressure to act quickly can lead individuals to default to familiar habits, even when they might not be the most appropriate response. This can be particularly concerning if the situation requires a unique or novel approach. For example, in maritime settings, a sudden equipment malfunction may trigger the habit of executing a standard procedure, even if the context demands an immediate deviation from the norm.

Recognising and breaking unhelpful habits is essential to enhance decision-making in safety-critical environments. It requires conscious effort, training, and mindfulness. Replacing unhelpful habits with more adaptive ones can be achieved through deliberate practice and reinforcement of desired behaviours. Crew members can undergo scenario-based training that challenges existing habits, promoting more effective responses to a variety of situations.

EXAMPLE

DEMONSTRATING THE IMPACT OF HABITS ON DECISION-MAKING

Imagine a scenario where a maritime crew routinely conducts safety checks during departure but often encounters minor delays. To expedite the process, the crew forms a habit of conducting brief checks, assuming that everything will likely be in order. During one departure, a crucial system malfunctions, but the crew, influenced by their habit, overlooks the issue and depart. This decision, driven by the habit of expediting the process, inadvertently leads to a critical safety lapse.

In this example, the habit of prioritising efficiency over thoroughness impacted the crew's decision-making, highlighting the importance of cultivating adaptive habits that prioritise safety without compromising efficiency.

By acknowledging the role of habits in decision-making and proactively working to develop more adaptive behaviours, maritime professionals can elevate their ability to respond effectively to safety-critical incidents.

INTEGRATING COGNITIVE BIASES, EMOTIONS, SYSTEM 1 AND 2, AND PSYCHOLOGICAL DEFENCES

In the previous sections, we explored cognitive biases, emotions, the brain's dual process theory (System 1 and 2), and the influence of habits on decision-making. Now, let us delve into how these elements interplay in safety-critical situations and examine the role of psychological defences in shaping our choices.

INTERPLAY BETWEEN COGNITIVE BIASES, EMOTIONS, SYSTEM 1 AND 2

HOW EMOTIONS AND COGNITIVE BIASES INFLUENCE SYSTEM 1 AND 2

In high-pressure shipboard environments, emotions can significantly impact the functioning of System 1 and System 2. For example, during an emergency situation, fear and adrenaline can trigger instinctive responses from System 1, potentially overriding more deliberate thinking processes. Under the influence of emotions, cognitive biases may become more pronounced, leading to hasty judgments or decisions based on limited information. Recognising the interplay between emotions, cognitive biases, and the brain's dual systems is crucial for understanding how our decision-making can be affected in safety-critical incidents. You might want to go back and review the case study presented at the start of this guide.

STRATEGIES FOR RECOGNISING AND MITIGATING BIASES IN DECISION-MAKING

Mitigating the impact of cognitive biases requires intentional effort. For instance, let's consider the availability bias - crew members may have vivid memories of recent incidents involving certain equipment failures, making them more likely to overestimate the likelihood of similar failures occurring in the future. By conducting thorough risk assessments and using historical data to support decision-making, the crew can counteract the influence of the availability bias and make more informed choices.

ADDRESSING PSYCHOLOGICAL DEFENCES AND ENHANCING DECISION-MAKING

RECOGNISING DEFENCES IN HIGH-PRESSURE ENVIRONMENTS

In safety-critical situations on board, individuals may unknowingly resort to psychological defences as a coping mechanism. For example, when faced with a near-miss incident, crew members may downplay the significance of the event to protect their self-esteem or justify their actions. Recognising the presence of these defences is essential to promoting a culture of accountability and continual improvement.

MANAGING EMOTIONS AND BIASES THROUGH PSYCHOLOGICAL SAFETY ONBOARD

PSYCHOLOGICAL SAFETY IS PARAMOUNT ON BOARD, AS IT ALLOWS INDIVIDUALS TO EXPRESS CONCERNS, ASK QUESTIONS AND OFFER SUGGESTIONS WITHOUT FEAR OF EMBARRASSMENT OR RETRIBUTION.

Leadership plays a crucial role in fostering this level of safety, leading by example and demonstrating vulnerability in decision-making. When it comes to holding safety meetings or toolbox talks, encouraging open communication can make a significant difference. This promotes a culture of trust and transparency, which is vital for navigating safety-critical situations effectively.

Leadership's role extends beyond just setting examples; it is pivotal in promoting a culture of accountability. When leaders acknowledge their own fallibility and share past mistakes openly, it creates an environment where crew members feel comfortable doing the same. This practice sets a positive precedent, reinforcing the idea that learning from errors isn't just acceptable—it's a valuable part of building a resilient safety culture. By embracing this philosophy, we can create more adaptive and robust safety protocols, ready to meet the challenges that arise in maritime operations.

In closing, fostering psychological safety and open communication is not just a 'nice-to-have'; it's a 'must-have' for any organisation committed to safety excellence. These aspects form the bedrock upon which other safety measures can be effectively implemented and maintained. While this guide provides an introduction to these important concepts, we will explore them in greater depth in Guide 4.