

INTERPRETIVE GUIDE

Navigating the Interplay Between **Cognitive Ability** & **Dark-Side Personality** in Leadership Selection

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Cognitive Ability, Dark-Side Personality and Leadership Selection

In leadership selection, understanding the interplay between cognitive ability and dark-side personality is crucial for identifying candidates who can excel in their roles while also minimising the risk of derailment. Dark-side personality, as measured by the Hogan Development Survey (HDS), represents tendencies that can emerge when leaders are not at their best (e.g., under pressure), potentially hindering their performance, relationships, and reputation (Hogan & Hogan, 2009). Cognitive ability, on the other hand, is generally associated with reasoning and problem-solving capabilities (Cattell, 1943; Schneider & McGrew, 2012). The way these two factors interact may have beneficial or detrimental effects on leadership performance, depending on how they align.

For instance, high cognitive ability may mitigate the risks associated with certain dark-side personality tendencies by enabling a leader to anticipate the consequences of their behaviours and respond more effectively. On the other hand, in some cases, low cognitive ability may worsen maladaptive tendencies, such as excessive confidence, leading to someone overestimating their abilities to perform a complex task. These nuanced relationships underscore the importance of understanding how cognitive ability and dark-side personality tendencies interact, as their combined effect could influence a leader's decision-making, interpersonal relationships, and overall performance.

Moving Beyond a Comparative Approach

Traditionally, cognitive ability and personality have been viewed as separate and competing predictors of job performance. However, recent meta-analytical research suggests that both play an equally important role in predicting job performance (Sackett et al., 2022). Additionally, research indicates that meaningful combinations of cognitive ability and personality traits can be identified (Stanek & Ones, 2023), and they may provide deeper insights into leadership performance. These findings highlight the potential for a more integrated approach, one that goes beyond evaluating cognitive ability and personality in isolation and instead examines how they interact to shape leadership behaviour.

The Role of Metacognition in Leadership Performance

Metacognition provides a useful framework for understanding how cognitive ability and personality may interact to influence leadership performance. It refers to an individual's awareness and evaluation of their cognitive processes, including their ability to evaluate and regulate their thinking. Metacognition plays a crucial role in how people process information and make decisions. Research in this area has expanded beyond traditional intelligence models, showing how personality traits also influence how individuals think and behave intelligently (Bowman et al., 2001; Kleitman & Stankov, 2007).

Both dark-side personality traits and cognitive ability can affect how accurately leaders judge their own thinking and performance. For instance, leaders with strong tendencies toward certain derailleurs may struggle to assess their capabilities realistically, which can lead to overconfidence or excessive doubt. Similarly, those with lower cognitive ability may lack the insight to recognise their own knowledge gaps, raising the risk of poor decisions and ineffective leadership behaviours.

Implications for Leadership Selection

This paper explores the practical implications of the interplay between dark-side personality and cognitive ability in leadership selection. By examining how cognitive ability interacts with the full range of dark-side personality tendencies measured by the HDS, it provides insights into identifying candidates with cognitive and personality profiles that are likely to be well-suited to the demands of leadership roles. It also highlights the value of using integrated assessment approaches that consider both cognitive and personality factors to enhance selection decisions. The following sections outline the study's methodology, key findings for each dark-side personality tendency, and practical recommendations for leadership selection processes.

Research Method

This paper is based on a study that analysed data from 202 leaders across various industries. The sample consisted of managers (23%), mid-level managers (59%), and executives (18%).

Hogan Business Reasoning Inventory (HBRI)

Cognitive ability was measured using the Hogan Business Reasoning Inventory (HBRI). This assessment evaluates an individual's ability to define and solve complex business-related problems. It provides insight into how a person processes information, makes decisions, and balances short and long-term considerations in workplace settings (Hogan Assessment Systems, 2019).

Hogan Development Survey (HDS)

Dark-side personality tendencies were measured using the Hogan Development Survey (HDS). This assessment examines tendencies that can emerge when someone is not at their best (e.g., under pressure or complacent), which can undermine their leadership effectiveness. These tendencies, often referred to as 'derailers', can impact a leader's interpersonal relationships, decision-making, performance, and reputation (Hogan & Hogan, 2009).

Individual Work Performance Review (IWPR)

Each leader's capability was measured using the Individual Work Performance Review (IWPR; Van Lill & Taylor, 2022). This assessment is a multi-rater performance measure designed to evaluate a person's effectiveness in fulfilling job responsibilities. In the current study, manager ratings were examined for specific subscales selected to form a composite measure of capability (see Van Lill & Van der Merwe, 2022 for more information on differences between self versus managerial ratings of performance in the IWPR). A hierarchical factor analysis was conducted following the guidelines of Credé and Harms (2015) to assess whether a general factor could be extracted from the individual performance subscales. The subscales included:

- *Quality of Work*: The extent a person performs tasks with accuracy, thoroughness and attention to detail.
- *Technical Performance*: The ability to successfully execute tasks that are complex and require a high level of expertise.
- *Self-Development*: The degree a person actively seeks opportunities to enhance their competency by actively acquiring knowledge and new skills.
- *Dealing with Complexity*: The capability to think critically, make sound decisions, and take appropriate actions in uncertain or ambiguous situations where clear guidelines are lacking.

Statistical Analysis

The researchers used polynomial regression with response surface analysis (RSA) to examine the interaction between cognitive ability and dark-side personality (Shanock et al., 2010), as it relates to a leader's capability. This method allowed for a three-dimensional exploration of how the interplay between cognitive ability and dark-side personality tendencies impacted performance ratings of a leader's capability. Tables summarising the results of regression analyses are provided in the Appendix. The predictors used in the RSA models (i.e., HBRI and HDS) operate on different measurement scales and represent distinct psychological constructs. As a result, interpretations were intentionally adjusted to reflect these differences, with emphasis placed on overall trends.

¹ JVR Africa Group collected the assessment data for a criterion-validity study in South Africa and generously allowed PBC to write up the findings based on an analysis that was completed by Dr Xander van Lill (a Research Associate of JVR).

General Trend

Figure 1 illustrates the general pattern observed for most of the Hogan Development Survey (HDS) scales, showing how different combinations of business reasoning and dark-side personality tendencies relate to ratings of leadership capability. Across scales, business reasoning plays a moderating role in shaping how these tendencies are expressed and experienced. In general, higher levels of reasoning are associated with more favourable capability ratings, even when dark-side tendencies are elevated. On the other hand, lower reasoning ability is associated with a greater likelihood that dark-side tendencies detract from perceived capability.

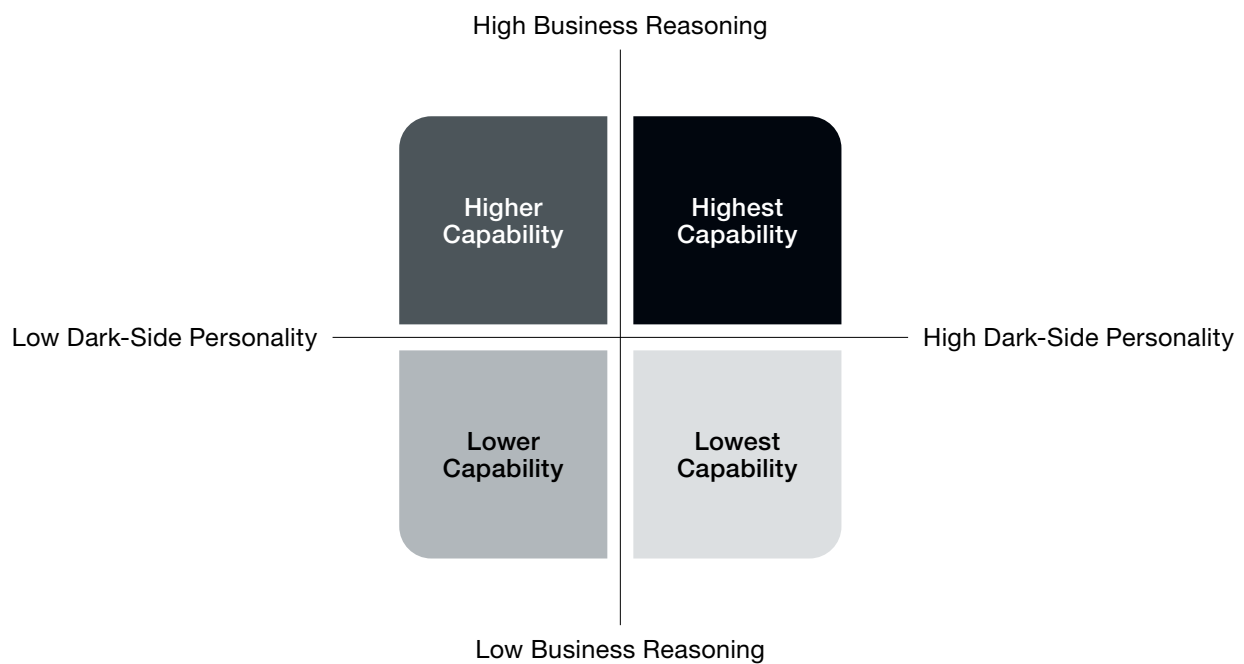


Figure 1. General Impact of Business Reasoning and Dark-Side Personality Combinations on Perceived Leadership Capability.

For several HDS scales, higher scores combined with stronger cognitive ability were associated with higher capability ratings. Even so, caution is still warranted when an individual scores in the high-risk range on an HDS scale (i.e., 90th percentile or above). In these cases, the derailing aspects of the tendency may still emerge, even when cognitive ability is high.

The sections that follow examine the interaction patterns in more detail for each HDS scale, showing how different combinations of reasoning ability and dark-side personality tendencies are associated with leadership capability, and outlining practical considerations for selection.

Excitable

Leaders with elevated scores on the Excitable scale tend to bring passion and energy to their roles. This may help them to inspire enthusiasm in their teams and set a high-energy tone for the organisation. However, when under pressure, these leaders may become easily disappointed or upset, overreact to difficult situations, and quickly lose confidence in people and projects. Their ability to sustain leadership effectiveness likely depends on how well they regulate their emotional responses and maintain resilience in challenging situations (Hogan et al., 2007).

Overall Results

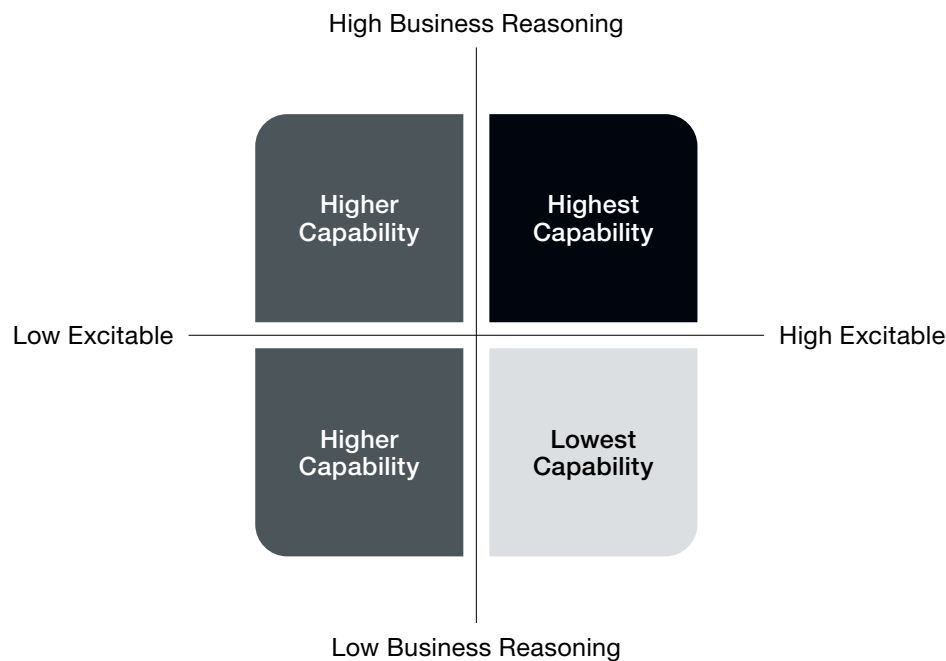


Figure 2. General Impact of Different Score Combinations of Business Reasoning and Excitable Tendencies on Ratings of Leadership Capability.

In this study, leaders with high Excitable tendencies and strong reasoning ability received exponentially higher capability ratings. This suggests that cognitive ability may help channel the positive aspects of Excitable tendencies, such as passion and energy, while tempering the risks associated with emotional reactivity.

In contrast, leaders with high Excitable tendencies but lower reasoning ability received the lowest capability ratings. These leaders may experience greater difficulty in managing their emotional reactions, sustaining focus, and adapting to setbacks. Emotional volatility can increase the mental effort required to process information. This may make it more difficult to adopt a step-by-step, logical process for solving problems (Stanek & Ones, 2023). They may come across as unpredictable or reactive, making it harder for them to cultivate trust, sustain motivation, and objectively approach decision-making when under pressure. Additionally, a tendency to disengage when facing cognitively demanding challenges may limit their capacity to recover from setbacks and navigate complex leadership responsibilities effectively.

Interestingly, leaders with low Excitable tendencies did not receive the highest capability ratings, even when they had strong reasoning ability. While lower emotional volatility may increase consistency, it may not necessarily translate into higher levels of perceived performance.

Overall, the findings suggest that cognitive ability moderates the relationship between Excitable tendencies and ratings of leadership capability. Leaders with elevated Excitable tendencies may benefit from strategies that support emotional regulation, sustained focus, and resilience under pressure. Strengthening their ability to pause before reacting, maintain perspective during setbacks, and apply structured problem-solving approaches may enhance leadership effectiveness, particularly in high-pressure environments where consistency, composure, and follow-through are critical.

Selection Considerations

High Excitable, High Cognitive Ability

Leaders with high Excitable tendencies and strong reasoning ability are likely to be perceived as dynamic, capable of energising their teams and driving momentum through a sense of urgency. They may excel in high-energy leadership roles where their initial enthusiasm can mobilise others. However, their effectiveness may still depend on their ability to regulate their emotional energy effectively and maintain composure under pressure.

During the selection process:

- Evaluate how these candidates manage their energy and emotions under pressure in high-stakes situations. Do they remain focused and composed during setbacks, or do they become reactive and lose momentum?
- Assess their ability to maintain a steady leadership, especially when facing complex challenges. Are they seen as inspirational, or does emotional variability reduce their impact?
- Incorporate emotionally demanding scenarios into assessment exercises, not just cognitively complex ones. Pay attention to whether candidates remain engaged and energised or become overwhelmed.

High Excitable, Low Cognitive Ability

Leaders with high Excitable tendencies but lower reasoning ability may struggle in complex, high-pressure environments requiring long-term vision, strategic problem-solving, and measured decision-making. They may be more likely to succeed in leadership roles where they can leverage their passion and enthusiasm without the burden of making high-stakes, long-term decisions independently. Roles that allow them to contribute their energy and motivation while working alongside steadier, strategically minded leaders may help balance their strengths and challenges. Structured support, clear expectations, and opportunities for collaboration may help them manage their challenges while maximising their strengths.

During the selection process:

- Assess how these candidates respond to pressure and setbacks, especially when tackling complex problems. Do they remain focused and solution-oriented, or do they become overwhelmed and lose momentum?
- Explore their ability to cope with uncertainty and ambiguity. Do they stay engaged and maintain a positive outlook when details are unclear, or do they become anxious, disengaged, or overly reactive?
- Evaluate how they handle frustration and whether they can maintain a constructive perspective in challenging situations. Do they seek input from others and adjust their approach, or do they become overwhelmed and emotionally reactive?

Sceptical

Leaders with elevated Sceptical scores tend to be highly attuned to others' motives, alert to potential threats, and critical in their thinking. These tendencies may help them identify flaws in ideas, challenge assumptions, and drive more rigorous decision-making. However, under pressure, they may become overly distrustful, interpret constructive feedback as criticism, and question others' intentions. This can strain relationships, hinder collaboration, and make it difficult for them to create an environment where team members feel valued, heard, and empowered to contribute openly. Their leadership effectiveness may be impacted by how well they balance their critical thinking with trust-building and openness to diverse perspectives (Hogan et al., 2007).

Overall Results

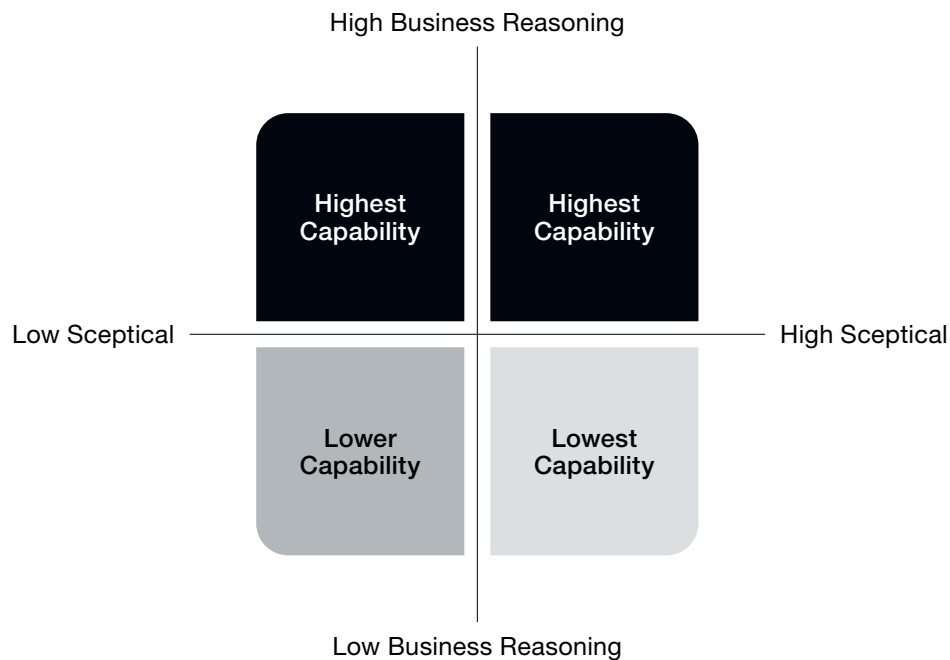


Figure 3. General Impact of Different Score Combinations of Business Reasoning and Sceptical Tendencies on Ratings of Leadership Capability.

The highest level of capability was observed in two scenarios: (1) leaders who had high Sceptical tendencies and high reasoning ability, and (2) leaders who had low Sceptical tendencies and high reasoning ability. This suggests that cognitive ability plays a role in determining whether Sceptical tendencies enhance or hinder performance. Leaders with strong reasoning abilities may be able to channel their scepticism into productive problem-solving, ensuring that their critical thinking sharpens decision-making rather than creating resistance.

In contrast, leaders with high Sceptical tendencies but lower reasoning ability received the lowest capability ratings. When reasoning skills are insufficient to balance scepticism, leaders may find it more challenging to distinguish valid concerns from unwarranted suspicion, to interpret feedback as personal criticism, and to become more resistant to collaboration. This combination may lead to inefficiencies in decision-making and problem-solving, as well as strained relationships.

Overall, the findings highlight the potential role of cognitive ability in moderating the impact of Sceptical tendencies. Leaders with elevated Sceptical scores may benefit from strategies to balance critical thinking with trust-building and openness to diverse perspectives. Strengthening their ability to engage constructively with others, remain receptive to feedback, and distinguish between justified scrutiny and excessive suspicion may enhance their leadership effectiveness, particularly in leadership roles requiring collaboration and adaptability.

Selection Considerations

High Sceptical, High Cognitive Ability

Leaders with high Sceptical tendencies and strong reasoning ability may be able to channel their critical thinking in productive ways. Their strong reasoning skills may help them challenge assumptions constructively, distinguish genuine risks from unfounded concerns, and strengthen decision-making with sharper insights. These leaders may thrive in roles requiring critical judgement, risk assessment, and strategic problem-solving. They may be able to effectively read between the lines and anticipate potential pitfalls, provided they remain receptive to strong counterarguments (Hart et al, 2020). While they may excel at identifying hidden risks and critically evaluating information, developing trust and openness to others' perspectives may help them avoid unnecessary conflict and enhance collaboration.

During the selection process:

- Assess how these candidates respond to feedback and differing viewpoints. Do they stay open and adaptable in discussions, or become defensive when their ideas are challenged?
- Evaluate their ability to build trust while maintaining a critical perspective. Can they balance healthy scrutiny with collaboration, or do their questions create tension or disengagement?
- Incorporate assessment exercises involving conflict or competing perspectives. Observe whether they challenge ideas constructively and contribute to better outcomes, or whether their scepticism impedes productive dialogue.

High Sceptical, Low Cognitive Ability

Leaders with high Sceptical tendencies and lower reasoning ability may find it more difficult to objectively evaluate information, process feedback, and remain open to others' perspectives. They may be more prone to viewing others with suspicion, misinterpreting motives, and engaging in unproductive conflict. As a result, they may struggle in roles that require diplomacy, relationship building, and constructive problem solving. While these leaders may perform better in structured environments with clearly defined responsibilities, unchecked scepticism may undermine their effectiveness. It may lead to overly combative behaviour, resistance to collaboration, and reluctance to consider strong counterarguments, particularly when interacting with highly capable colleagues who may be perceived as a threat.

During the selection process:

- Evaluate their openness to differing perspectives. Do they consider alternative views thoughtfully, or dismiss them quickly without reflection?
- Assess how they handle interpersonal tension. Can they question others constructively and stay focused on solutions, or do they become defensive and argumentative?
- Use structured scenarios involving collaboration and ambiguity. Observe whether they balance critical thinking with openness and adaptability, or whether their scepticism results in withdrawal or confrontation.

Cautious

Leaders who score highly on the Cautious scale tend to be risk-averse, highly deliberate in their decision-making, and focused on avoiding mistakes. Their thoughtful and measured approach can be valuable in leadership roles that require precision, thorough analysis, and sound judgment. However, under pressure, these leaders may struggle to make timely decisions, resist necessary change, or second-guess their judgment. Their effectiveness may depend on how well they balance caution with decisiveness, act confidently in the face of uncertainty, and avoid becoming paralysed by risk aversion (Hogan et al., 2007).

Overall Results

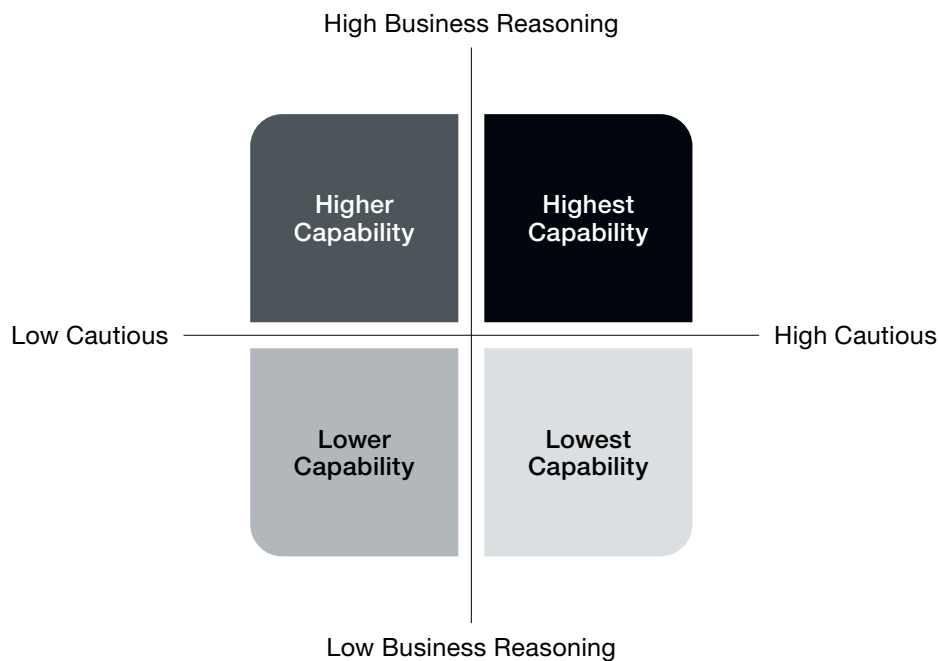


Figure 4. General Impact of Different Score Combinations of Business Reasoning and Cautious Tendencies on Ratings of Leadership Capability.

Exponentially higher levels of capability were observed in leaders with both high Cautious tendencies and high reasoning ability. This suggests that when caution is paired with strong cognitive skills, it can foster thoughtful risk assessment and methodical decision-making without excessive hesitation. Their analytical skills may enable them to identify risks while maintaining a strategic perspective, ensuring that their caution enhances rather than inhibits performance. These leaders are less likely to act impulsively and more likely to analyse complex problems before reaching a decision, which could be an asset in roles requiring high accuracy and sound judgement.

In contrast, leaders with high Cautious tendencies and lower reasoning ability received the lowest capability ratings. Without strong reasoning skills, excessive caution may significantly hinder performance. These individuals may question their ability to assess information effectively, which could lead to hesitation in providing clear direction or making timely decisions. This indecisiveness could hinder team progress and erode confidence, both in the leader and among colleagues. Over time, repeated difficulty in acting with certainty may reduce the leader's self-belief, creating a cycle that is difficult to break (Shea & Howell, 2000). Leaders with this combination may benefit from structured support, reassurance, and opportunities to build their sense of mastery incrementally.

Notably, leaders with low Cautious tendencies did not achieve the highest capability ratings, even when they had strong reasoning ability. While comfort and confidence with risk-taking can drive agility and rapid decision-making, it can also increase the likelihood of errors when not balanced by analytical thinking. While these leaders may act quickly and embrace change, they may also overlook important risks or rationalise sticking with decisions (even poor ones) due to their confidence and prior investment in those choices (Brockner, 1992). This underscores the importance of balancing risk tolerance with critical analysis in leadership roles.

Selection Considerations

High Cautious, High Cognitive Ability

Leaders with this profile may successfully apply their cautious mindset in ways that promote risk awareness and high-quality decision-making. They may excel in roles that require careful risk management, high accuracy, and methodical decision-making. Their ability to weigh risks and analyse complex information effectively is an asset, provided they do not become overly hesitant or resistant to necessary action. They may benefit from structured decision-making frameworks and clear escalation points for risk concerns, ensuring that caution does not lead to unnecessary delays (Kahneman, 2012).

During the selection process:

- Assess their ability to act decisively when required to make time-sensitive decisions. Do they weigh risks productively and act when needed, or do they default to excessive deliberation?
- Explore how they balance caution with progress. Can they stay focused on outcomes while carefully managing risk, or do they become overly concerned with avoiding mistakes?
- Use scenarios with time constraints or imperfect information. Observe whether they can apply their analytical strengths to move forward confidently, or whether uncertainty leads to stalling or excessive risk-avoidance.

High Cautious, Low Cognitive Ability

Leaders with this profile may struggle in dynamic, high-stakes environments that require rapid decision-making, due to excessive indecision and difficulty adapting to changing circumstances. They may perform better in highly structured environments with clear decision-making frameworks, predefined risk controls, and low ambiguity (Kahneman, 2012). These conditions can help reduce the cognitive burden associated with processing uncertainty and evaluating potential risks, and provide the clarity they need to move forward. However, their hesitancy in novel or time-sensitive situations may still delay decision-making, leading to missed opportunities and frustration among those who rely on them for leadership direction.

During the selection process:

- Evaluate their ability to make decisions with incomplete or ambiguous information. Do they seek clarity and act when necessary, or do they default to hesitation or avoidance?
- Assess their level of confidence in their own judgement. Do they take ownership for making timely decisions, or do they become stuck in prolonged deliberation?
- Explore their willingness to operate outside their comfort zone and commit to decisions. Can they take calculated risks when needed, or do they consistently defer or delay action?

Reserved

Leaders who score highly on the Reserved scale tend to be independent, socially distant, and more focused on tasks than relationships. While they can be self-sufficient, task-focused, and less distracted by social demands, their preference for working autonomously rather than engaging extensively with others may impact their ability to motivate, inspire, and connect with their teams. They may be perceived as less accessible or emotionally distant, which can limit their influence in roles that require high visibility, stakeholder management, and relationship-building. While their objectivity and focus on execution can be strengths, their leadership effectiveness may depend on their ability to engage others, communicate a vision, and foster collaboration (Hogan et al., 2007).

Overall Results

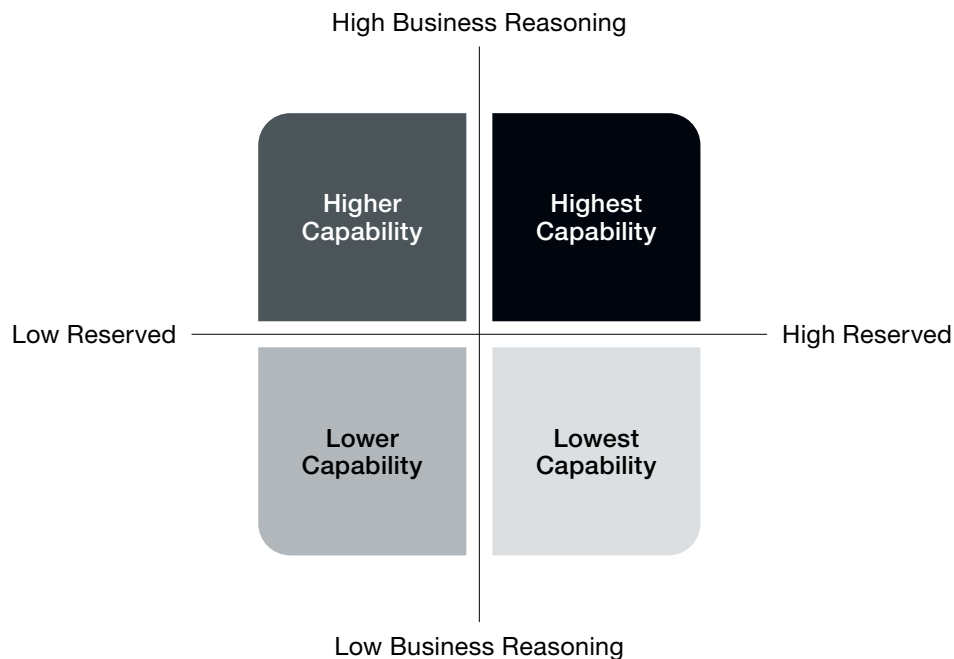


Figure 5. General Impact of Different Score Combinations of Business Reasoning and Reserved Tendencies on Ratings of Leadership Capability.

Exponentially higher levels of capability were observed among leaders with both high Reserved tendencies and high reasoning ability. This suggests that cognitive ability may help these leaders apply their independence productively, allowing them to focus deeply on analytical problem-solving without unnecessary social distractions.

Conversely, the lowest levels of capability were found in leaders with high Reserved tendencies and lower reasoning ability. This pattern suggests that when strong cognitive skills are not present, a preference for independence may lead leaders to disengage from seeking input or clarification from those who may have useful insights, increasing the risk of missed opportunities to refine their thinking and correct potential errors in judgment.

Notably, leaders with low Reserved tendencies did not consistently achieve the highest levels of capability, even when they had high reasoning ability. While greater social engagement can support collaboration and influence, it may also introduce distractions that reduce focus on complex decision-making.

Selection Considerations

High Reserved, High Cognitive Ability

Leaders with high Reserved tendencies and strong reasoning ability are likely to strategically manage their preference for independence, allowing them to focus deeply on processing information, as well as on complex problem-solving and decision-making without unnecessary social distractions. Their ability to analyse situations objectively and make data-driven decisions can be an asset, particularly in technical, operational, or high-stakes environments where precision and critical thinking are valued (Hogan Data Science, 2020). They are less likely to be influenced by external social pressures, which can enhance independent judgement and impartial decision-making. However, their effectiveness as leaders may also depend on their ability to communicate their vision, provide clear direction, and foster trust within their teams. If they remain withdrawn, they risk appearing disengaged or failing to provide the interpersonal leadership their teams require. Evaluating whether they can adapt their leadership style to connect with different stakeholders, provide guidance, and foster collaboration will help determine their effectiveness in people-focused leadership roles.

During the selection process:

- Assess their willingness to engage with others and share insights proactively. Do they communicate their decisions and reasoning clearly, or are they distant or disengaged?
- Explore how well they adapt their leadership style to the audience and context. Can they build trust and connection when influence or team alignment is required?
- Evaluate how they balance independent thinking with collaboration. Do they take others' input into account when appropriate, or do they solely rely on their own judgement?

High Reserved, Low Cognitive Ability

Leaders with high Reserved tendencies and lower cognitive ability may struggle in roles that demand active collaboration, visible leadership, and adaptive communication. They may avoid difficult conversations, withhold critical information, or fail to recognise evolving team needs. Their preference for working independently, combined with difficulty processing complex information, may make it challenging for them to build trust, communicate with clarity, and provide timely guidance. These leaders are likely to perform better in highly structured environments with clearly defined responsibilities and minimal requirements for interpersonal engagement. Targeted support, such as clear leadership expectations, communication templates, and coaching that encourages deliberate connection with others, may help enhance their visibility and leadership presence. Building their ability to respond to feedback, participate in shared decision-making, and engage meaningfully with stakeholders will likely improve their leadership effectiveness.

During the selection process:

- Assess their ability to maintain an active and visible leadership presence. Do they demonstrate social intelligence and adjust their engagement accordingly, or do they struggle to assess the social demands of the situation and inappropriately withdraw?
- Evaluate how they respond to feedback on their leadership style. Do they show insight and integrate suggestions thoughtfully, or do they have difficulty processing feedback, missing patterns in relational dynamics or oversimplifying responses?
- Explore their capacity to engage others in collaborative decision-making. Do they demonstrate flexible reasoning and grasp different viewpoints, or do they show a tendency towards concrete, rigid thinking, avoiding deliberation in favour of unilateral decisions?

Leisurely

Leaders with elevated scores on the Leisurely scale tend to place strong value on independence, autonomy, and the freedom to work according to their own agenda. While they are often self-sufficient and persistent in pursuing their goals, they may also become privately resistant to others' direction and frustrated when expectations conflict with their own priorities. In leadership roles, this may result in selective engagement, quiet resistance to feedback, and a reluctance to adjust their focus when others' needs diverge from their own. Their success as leaders may depend on balancing autonomy with responsiveness, aligning personal priorities with organisational objectives, and fostering open collaboration rather than working around others' expectations (Hogan et al., 2007).

Overall Results

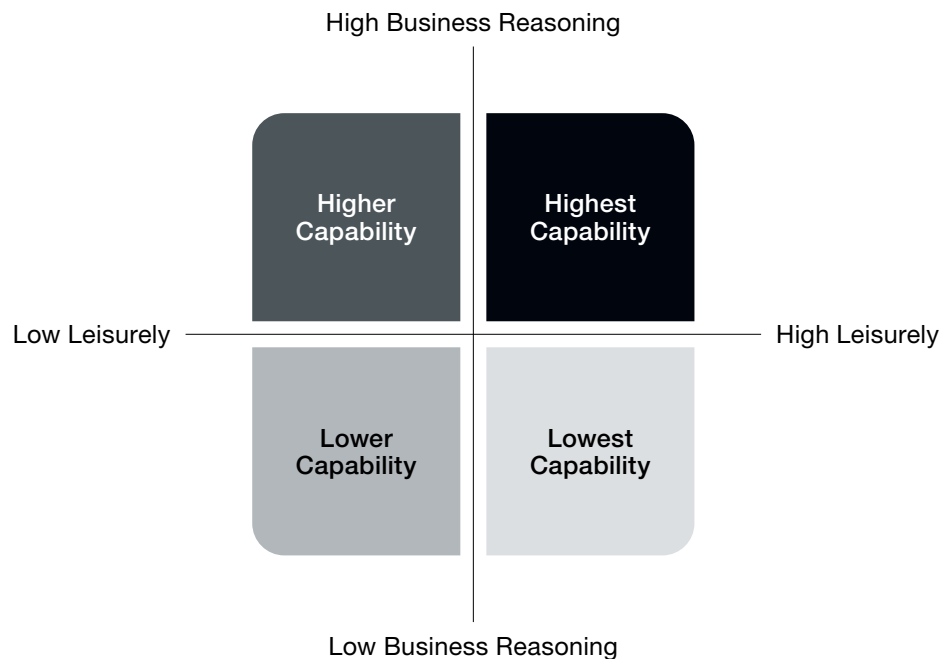


Figure 6. General Impact of Different Score Combinations of Business Reasoning and Leisurely Tendencies on Ratings of Leadership Capability.

The highest levels of capability were observed in leaders with both high Leisurely tendencies and high reasoning ability. This suggests that when cognitive ability is strong, leaders who value autonomy can effectively direct their independence towards productive self-direction, strategic decision-making, and goal pursuit. These leaders may use their cognitive strengths to filter competing demands and focus on what matters most, contributing to leadership delivery and goal attainment.

Leaders with low Leisurely tendencies and high reasoning ability also demonstrated higher capability ratings, although not as high as those with high Leisurely and high reasoning ability. These leaders may be more accommodating of others' expectations and receptive to feedback, using their reasoning skills to integrate diverse viewpoints and navigate complex environments. However, compared to high Leisurely leaders, they may be more easily influenced by external demands, which could sometimes lead to over-accommodation or difficulty asserting their own priorities. Their leadership effectiveness may depend on their ability to balance responsiveness with independent decision-making, ensuring that they do not become overly deferential or lose sight of their strategic direction or the key priorities that will help to differentiate their teams.

The lowest capability ratings were observed in leaders with high Leisurely tendencies and lower reasoning ability. This combination may hinder effective leadership by reinforcing a narrow focus on personal agendas, low responsiveness to direction, and resistance to meaningful feedback. Without strong cognitive skills to evaluate information critically or weigh competing priorities, these leaders may struggle to navigate complex organisational demands, follow through on commitments, or adapt to shifting expectations. They may resist guidance, selectively interpret input to support their own agenda, and appear inflexible in their thinking or unresponsive to direction (Oreg, 2018). While they may present as agreeable in discussion, especially when intellectually challenged, they may fail to implement feedback or act on required changes, making them difficult to manage in practice.

Selection Considerations

High Leisurely, High Cognitive Ability

Leaders with this combination may be well suited to leadership roles that require self-direction, strategic oversight, and accountability for self-valued complex outcomes. Their preference for independence may support their focus and persistence in achieving goals. At the same time, their strong reasoning ability may enable them to manage expectations thoughtfully and maintain alignment with strategic objectives. However, their leadership effectiveness may depend on their ability to remain engaged with team objectives, accept direction when needed, and ensure they are not selectively cooperative. If they become too focused on their own agenda at the expense of organisational priorities or collective team goals, they may create misalignment and hinder collaboration, decision-making, and overall team cohesion.

During the selection process:

- Assess their willingness to engage with team objectives, especially when they differ from their own. Do they remain open to others' input and responsive to suggestions, or do they resist guidance unless it aligns with their own agenda?
- Evaluate how they respond to feedback and performance direction. Do they integrate feedback into their leadership approach, or do they dismiss input that challenges their perspective?
- Explore their ability to align personal priorities with broader organisational goals. Can they maintain strategic focus while also responding to others' needs, or do they selectively engage based on their own preferences?

High Leisurely, Low Cognitive Ability

Leaders with high Leisurely tendencies and lower reasoning ability may find it challenging to work in highly collaborative or feedback-driven environments, where responsiveness, adaptability, and engagement with others' perspectives are key. Their strong preference for autonomy, combined with difficulty processing complex expectations, may result in them selectively engaging in responsibilities based on their preferences rather than team or organisational needs. These leaders may function more effectively in roles with clear performance expectations, structured accountability, and regular check-ins to ensure alignment with organisational goals.

During the selection process:

- Assess how they handle direction and shifting performance expectations. Do they acknowledge and act on required changes, or struggle to grasp or apply new instructions, especially when these deviate from their habitual ways of doing things? Do they demonstrate rigidity or stubborn resistance when required to adapt their priorities?
- Evaluate their ability to process and integrate feedback. Do they quickly adjust their way of thinking based on others' feedback, or do they need repeated or simplified explanations before they accept it?
- Explore their capacity to strategically align their responsibilities with the larger and more ambiguous objectives of the organisation. Do they effectively manage these types of responsibilities, or do they default to narrow, overly concrete interpretations of tasks and avoid strategic alignment?

Bold

Leaders who score highly on the Bold scale tend to be confident, assertive, and eager to take on new challenges. Their strong self-belief and willingness to take charge can be highly valuable in driving ambitious initiatives, influencing others, and positioning the organisation competitively. However, if not managed effectively, high Bold leaders may become overconfident, dismissive of feedback, and resistant to alternative perspectives. Their leadership effectiveness may depend on their ability to balance confidence with humility, integrate diverse viewpoints, and remain open to constructive input while maintaining decisiveness (Hogan et al., 2007).

Overall Results

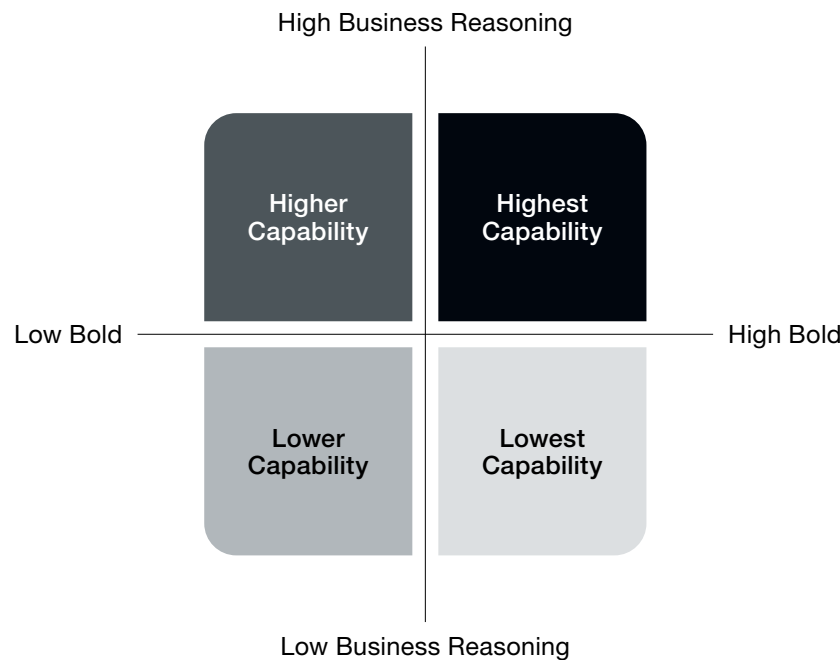


Figure 7. General Impact of Different Score Combinations of Business Reasoning and Bold Tendencies on Ratings of Leadership Capability.

Exponentially higher levels of capability were observed in leaders with high Bold tendencies and high reasoning ability. This suggests that when cognitive ability is strong, high levels of confidence and assertiveness can be channelled into strategic thinking, long-term vision-setting, and impactful decision-making. These leaders are likely to act decisively, maintain focus on bold organisational goals, and apply sound judgement and analytical rigour. Their cognitive strength may help them harness their ambition productively, enabling them to lead with clarity, persist through challenges, and inspire others through their confidence and drive.

Leaders with low Bold tendencies and high reasoning ability also demonstrated elevated capability, though not at the highest levels. These individuals may exhibit more humility and openness to collaboration, using their reasoning skills to navigate complex decisions and approach leadership with a strategic mindset. These leaders may also be more inclined to engage in collaborative leadership and consensus-building, leveraging input from others to refine their decision-making. However, their leadership effectiveness may rely on their ability to assert themselves when needed, take decisive action, and project confidence to mobilise others.

In contrast, the lowest levels of capability were observed in leaders with high Bold tendencies and lower reasoning ability. When confidence is not paired with strong cognitive ability, highly Bold leaders may overestimate their abilities, underestimate task complexity, and make premature or poorly informed decisions. They are less likely to recognise limitations in their approach or seek out corrective input, often dismissing valuable advice and persisting with flawed strategies. This combination of overconfidence and limited insight can significantly increase the risk of poor judgment, particularly in ambiguous, high-pressure, or high-stakes environments (Douglas et al., 2023).

Selection Considerations

High Bold, High Cognitive Ability

Leaders with this combination may excel in leadership roles, where assertiveness, strategic thinking, and the ability to influence others are essential. Their ability to project confidence and push forward ambitious goals may make them suited for leading transformational initiatives, setting a long-term organisational vision, and navigating competitive environments. However, their effectiveness may also depend on their ability to balance decisiveness with collaboration, seeking diverse perspectives, and recognising when adjustments to their approach are necessary. Encouraging a culture of open dialogue and collaborative decision-making may help these leaders avoid blind spots and maintain credibility as inclusive and adaptable leaders.

During the selection process:

- Assess their openness to input and constructive feedback. Do they seek others' input and engage in meaningful dialogue, or do they default to relying solely on their own judgement?
- Evaluate their ability to integrate feedback and adjust their approach when needed. Do they demonstrate flexibility in response to new information, or do they persist with their original plans despite signs that a change in direction is warranted?
- Explore how effectively they balance confidence with humility in decision-making. Do they combine assertiveness with thoughtful reflection and openness to diverse perspectives, or do they assume they have the best answers without considering alternative viewpoints?

High Bold, Low Cognitive Ability

Leaders with higher Bold tendencies but lower reasoning ability may struggle in roles that require careful deliberation, adaptability, and humility in learning from mistakes. They may be at risk of overpromising and underdelivering due to a lack of awareness about the complexity of a project. This tendency can be further amplified when they hold inflated perceptions of their reasoning abilities. They may be better suited to roles with clear guidelines and decision boundaries, strong oversight, and structured leadership development opportunities, where their confidence can be channelled into productive leadership behaviours. These supports may help temper their overconfidence and reinforce the importance of collaboration, accountability, and informed judgement.

During the selection process:

- Assess how they respond to critical feedback and opposing views. Do they reflect on others' advice and adapt their thinking, or do they become defensive and persist without reconsidering?
- Evaluate their willingness to acknowledge their limitations and seek support. Do they leverage others' expertise when making decisions, or do they default to prioritising their own ideas and perspectives?
- Explore their ability to accurately assess complexity. Can they objectively evaluate the demands of a task and their own capabilities, or do they underestimate challenges and overestimate their judgement?

Mischievous

Leaders who score highly on the Mischievous scale tend to be charming, risk-taking, and comfortable testing limits. They may thrive in dynamic, fast-paced environments where adaptability, influence, and persuasion are critical to success. Their ability to navigate ambiguity, take calculated risks, and challenge conventional thinking may help them drive innovation and uncover new opportunities. However, if these tendencies are overplayed, they may lead to impulsive decisions, taking ill-advised risks, and an overreliance on charm to smooth over their mistakes and downplay commitments. Their effectiveness is likely to depend on their ability to balance risk-taking with accountability, ensuring follow-through on commitments, and building trust through transparent and consistent decision-making (Hogan et al., 2007).

Overall Results

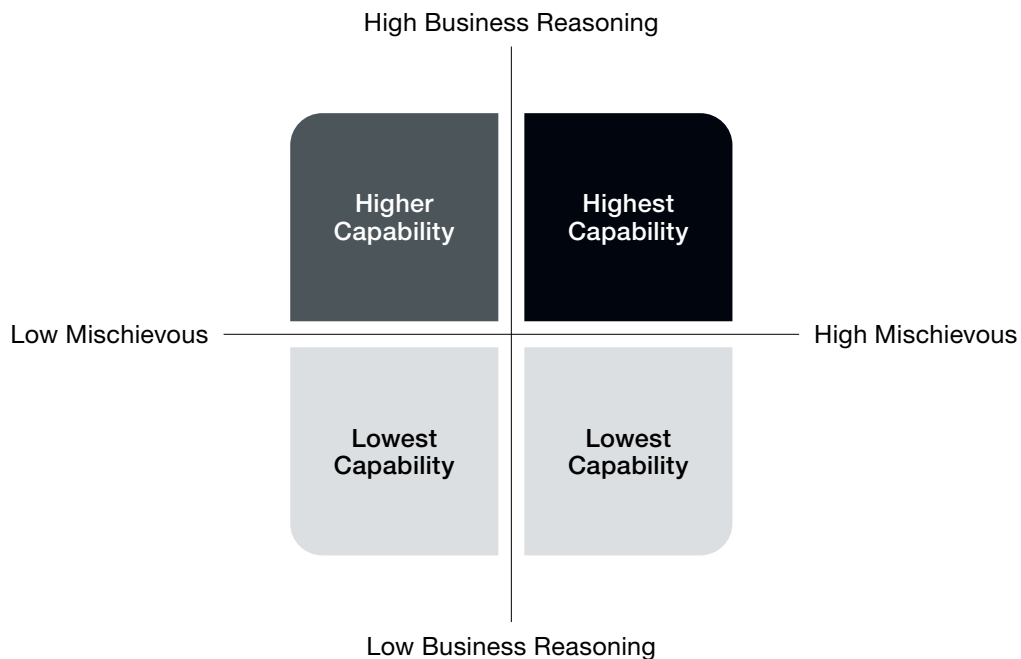


Figure 8. General Impact of Different Score Combinations of Business Reasoning and Mischievous Tendencies on Ratings of Leadership Capability.

The highest levels of capability were observed in leaders with high Mischievous tendencies and high reasoning ability. When cognitive ability is strong, leaders who are more risk-tolerant and reward-seeking may channel these tendencies strategically to seize viable opportunities, balancing their willingness to take risks with sound decision-making. They may leverage their stronger cognitive ability to evaluate opportunities strategically, assess trade-offs, and put contingency plans in place to minimise the likelihood of poor outcomes. These leaders may use their quick thinking and persuasive style to drive progress and innovation while leveraging cognitive control to avoid recklessness or costly mistakes.

Leaders with low Mischievous tendencies and high reasoning ability also demonstrated elevated capability, although not at the highest levels. These leaders may be more cautious, rule-abiding, and methodical in their approach. When paired with strong cognitive abilities, this may enhance their ability to evaluate situations carefully, make well-reasoned decisions, and avoid unnecessary risks. However, their leadership effectiveness may depend on their ability to act decisively and embrace calculated risks when necessary, ensuring they do not miss opportunities due to excessive caution.

The lowest levels of capability were found in leaders with either high or low Mischievous tendencies when reasoning ability was low. This pattern suggests that when reasoning ability is low, both risk-taking and risk-avoidant leaders may struggle to be effective, but for different reasons. High Mischievous leaders with low reasoning ability may engage in impulsive decision-making and take excessive risks without fully considering consequences. They may struggle to anticipate pitfalls or push boundaries inappropriately, behaviours linked to counterproductive work outcomes (Dilchert et al., 2007). In contrast, low Mischievous leaders with low reasoning ability may be overly risk-averse, hesitant to take action, and slow to adapt, which can reduce mental agility and lead to missed opportunities in dynamic leadership contexts.

Selection Considerations

High Mischievous, High Cognitive Ability

Leaders with this combination may excel in leadership roles where quick thinking, persuasion, and a tolerance for uncertainty are advantageous. Their ability to challenge norms and seize opportunities in unpredictable environments may help contribute to business growth, competitive positioning, and innovation. However, their effectiveness may hinge on their ability to take ownership of the risks they initiate and to ensure they deliver on their promises, rather than relying on charisma to gain buy-in.

During the selection process:

- Evaluate how they manage risk in decision-making scenarios. Do they take calculated risks aligned with strategic goals, or do they use sophisticated reasoning to self-justify their need to push boundaries?
- Assess how they influence others to gain support. Do they use their persuasive skills transparently and constructively, or do they rely on charm and their ability to selectively position facts and arguments to support their particular point of view?
- Explore their willingness to take responsibility for outcomes. Do they adjust their approach when things go wrong and apply lessons learned, or do they reason their way out of taking accountability and move on quickly?

High Mischievous, Low Cognitive Ability

Leaders with higher Mischievous tendencies but lower cognitive ability may find it challenging in roles that require structured decision-making, regulatory compliance, or adherence to well-defined processes. Their tendency to bend rules, seek quick wins, and rely on charm may deliver short-term gains, but could undermine their long-term credibility and effectiveness. These leaders may be better suited to fast-paced environments that reward initiative, provided strong accountability mechanisms are in place to manage risk. Targeted support, such as structured feedback, clear performance expectations, and development focused on accountability and long-term planning, may help strengthen their leadership impact and reduce their derailment risk.

During the selection process:

- Assess their ability to balance risk-oriented decisions with accountability. Do they take calculated risks aligned with strategic goals, or act impulsively without considering long-term consequences?
- Evaluate how they respond to ethical or high-stakes decisions. Do they consider broader implications and show sound judgement, or focus narrowly on short-term wins and self-interest?
- Explore their consistency in following through on commitments. Do they demonstrate a clear understanding of the link between their responsibilities and broader outcomes, or do they disengage when tasks require deeper reasoning, delayed reward, or balancing competing priorities?

Colourful

Leaders who score highly on the Colourful scale tend to be seen as charismatic, expressive, and socially dynamic, often commanding a strong presence in leadership settings. Their social presence can be valuable for engaging teams, driving visibility, and inspiring others. However, when overused, these tendencies may lead to dominating conversations, prioritising attention over substance, and struggling with consistency and follow-through. Their leadership success may depend on their ability to balance visibility with execution, maintain focus on strategic priorities rather than personal recognition, and ensure that their influence translates into meaningful outcomes (Hogan et al., 2007).

Overall Results

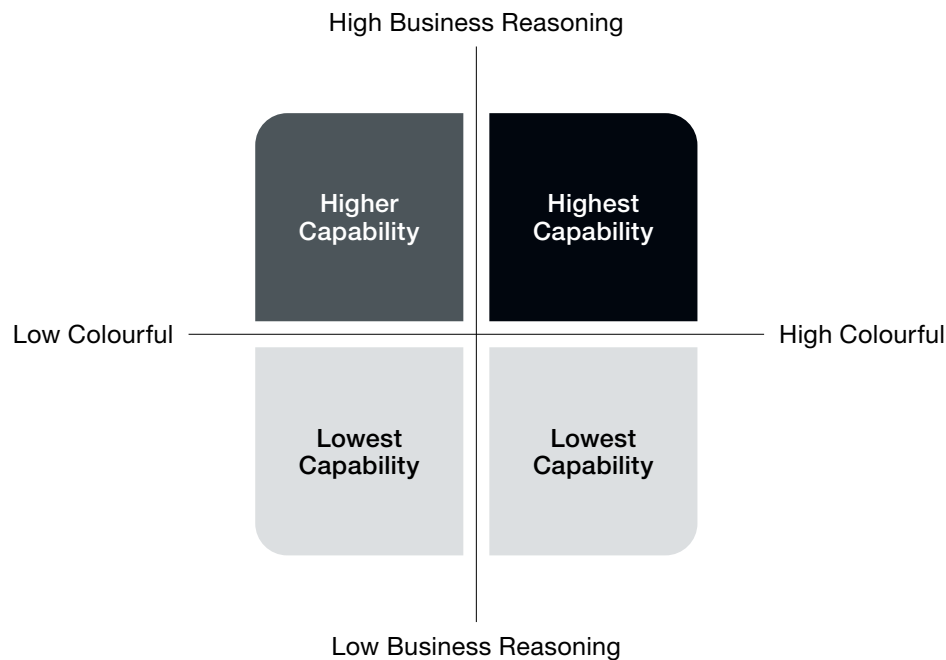


Figure 9. General Impact of Different Score Combinations of Business Reasoning and Colourful Tendencies on Ratings of Leadership Capability.

The highest levels of capability were observed in leaders with high Colourful tendencies and high reasoning ability. This suggests that when cognitive ability is strong, leaders who are expressive and socially dynamic may be able to channel these tendencies productively, ensuring that their charisma translate into impactful decision-making rather than superficial engagement. Their ability to capture attention and energise teams, combined with strong analytical skills, may allow them to balance visibility with thoughtful execution, ensuring they maintain focus on long-term objectives.

Leaders with low Colourful tendencies and high reasoning ability also demonstrated elevated capability, although not at the highest levels. While these leaders may not naturally seek the spotlight, their strong cognitive skills may enable them to engage effectively when needed, focusing more on substance than style. They may be more inclined to lead through well-reasoned decision-making and structured execution rather than charisma, making them effective in roles that require disciplined leadership and behind-the-scenes influence. However, their leadership effectiveness may depend on their ability to engage and inspire others when necessary, ensuring their impact is not diminished by a lack of visibility.

The lowest levels of capability were found in leaders with both high and low Colourful tendencies when reasoning ability was low. High Colourful leaders with lower reasoning ability may be highly engaging but lack the detail focus and structured thinking needed for disciplined execution, leading to inconsistency, shifting priorities, or focusing on gaining attention rather than delivering results (Hogan Data Science, 2020). Conversely, low Colourful leaders with low reasoning ability may struggle with both interpersonal impact and strategic insight, limiting their influence and responsiveness in leadership settings.

Selection Considerations

High Colourful, High Cognitive Ability

Leaders with this combination may excel in high-visibility roles that require high energy, persuasive communication, and the ability to mobilise others around ambitious goals. Their strong social presence, when paired with higher cognitive ability, may enable them to inspire action, build engagement, and navigate complex stakeholder environments. Their ability to command attention can be a powerful asset, particularly in roles that require visibility, influence, and strong interpersonal engagement. However, their long-term effectiveness may depend on their ability to maintain focus, follow through on commitments, and ensure their influence translates into tangible outcomes, not just engagement or recognition.

During the selection process:

- Assess how they use their visibility to support the achievement of outcomes. Do they focus on advancing organisational and team goals, or prioritise personal recognition over delivering meaningful results?
- Evaluate how they manage attention and prioritise under pressure. Do they maintain focus while navigating high-profile demands, or lose track of long-term objectives when pulled towards socially rewarding opportunities?
- Explore their ability to engage others with purpose. Do they build alignment and drive outcomes, or seek visibility and social stimulation without delivering meaningful results?

High Colourful, Low Cognitive Ability

Leaders with this combination may appear highly engaging but struggle to maintain focus, deliver consistent results, or lead through complex decisions. As a result, they may find it challenging to thrive in roles requiring disciplined analysis, complex problem-solving, or sustained execution. They may frequently shift priorities, focus on relationships over task completion, or overlook important operational details. These leaders may be better suited to roles with clear performance expectations, structured oversight, and regular feedback mechanisms that help maintain focus on priority outcomes and reduce the risk of derailment.

During the selection process:

- Assess their capacity to sustain attention and apply structured thinking to goals and execution. Do they remain focused and logically sequence tasks toward completion, or do they get sidetracked by social cues, struggle to maintain mental clarity, or show signs of distractibility under pressure?
- Evaluate whether they can balance interpersonal confidence with effective task execution. Do they use sound reasoning to back their contributions and follow through with results, or do they rely on interpersonal antics to convince others?
- Explore their ability to operate effectively in roles with defined expectations and performance metrics. Do they understand what is required, manage time and attention to detail well, and complete tasks in an organised manner, or do they struggle to make sense of less direct instructions, make avoidable mistakes, and miss opportunities to apply feedback and improve their work?

Imaginative

Leaders who score highly on the Imaginative scale tend to be creative big-picture thinkers, often contributing novel ideas and fresh perspectives. Their ability to envision new possibilities can help drive innovation and inspire creative problem-solving. However, when overplayed, these tendencies may make it difficult for them to maintain focus, communicate ideas clearly, or translate vision into action. They may become absorbed in abstract thinking, present overly complex solutions, and lose others by failing to ground their ideas in practical realities. Their leadership effectiveness may depend on their ability to balance creativity with practicality, refine abstract concepts into actionable strategies, and align their vision with business priorities. By staying attuned to feasibility, expressing ideas in accessible terms, and ensuring their innovations address real-world needs, they can strengthen their leadership impact while maintaining their strengths as forward-thinking leaders (Hogan et al., 2007).

Overall Results

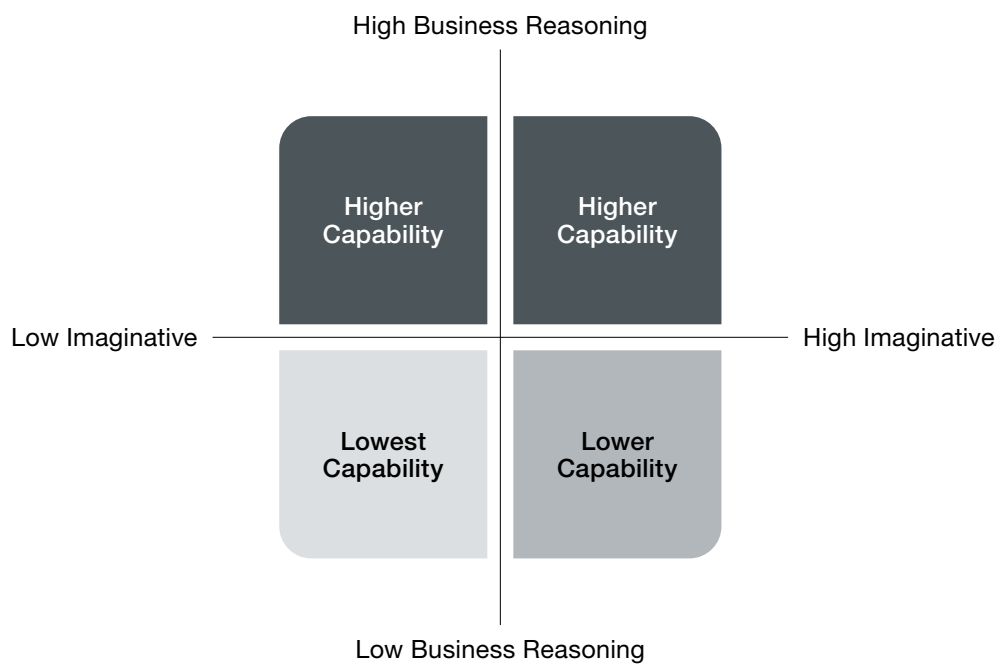


Figure 10. General Impact of Different Score Combinations of Business Reasoning and Imaginative Tendencies on Ratings of Leadership Capability.

The highest levels of capability were observed in leaders with high reasoning ability and moderate Imaginative tendencies (i.e., neither extremely high nor extremely low Imaginative scores). This suggests that the most effective leaders may be those who balance creative thinking with analytical rigour, allowing them to generate novel insights while also focusing on practicality and feasibility. Their ability to combine innovative problem-solving with disciplined execution may allow them to contribute to long-term strategy while maintaining focus on tangible outcomes.

Leaders with high Imaginative tendencies and low reasoning ability demonstrated relatively lower capability, although not as low as those with low levels of both Imaginative tendencies and reasoning ability. While creative and visionary thinking can be strengths, when they are not paired with strong reasoning ability, it may lead to impractical ideas, difficulty maintaining focus, and challenges in translating concepts into actionable strategies. Prior research suggests that when strong analytical skills do not support an openness to new ideas, it may increase the risk of drawing tenuous or overly complex connections that lack practical value (DeYoung, 2015; Stanek & Ones, 2023). These leaders may benefit from clear decision-making frameworks, collaboration with more detail-oriented colleagues, and strategies that help them focus their thinking and align ideas with business needs.

The lowest levels of capability were found in leaders with low Imaginative tendencies and low reasoning ability. These leaders may favour conventional solutions, be slow to embrace change, and struggle adapting in unfamiliar or evolving situations. When leaders have low levels of both cognitive ability and openness to new ideas, they may struggle with adaptability, innovative problem-solving, and responding effectively to complex or evolving challenges. These individuals may favour tried-and-tested or conventional approaches, be slow to embrace change, and may find it difficult to identify creative solutions to strategic issues.

Selection Considerations

High Imaginative, High Cognitive Ability

Leaders with this combination may excel in roles where innovative thinking, strategic foresight, and analytical rigour are valued. Their ability to challenge conventional thinking, envision alternative possibilities, and introduce fresh solutions may be an asset, provided they also demonstrate the ability to refine abstract concepts into viable, high-impact strategies. With strong reasoning skills, they may evaluate the feasibility of their ideas, prioritise effectively, and ensure their creative insights align with business objectives. However, their leadership effectiveness may depend on their ability to stay focused on execution, articulate ideas clearly, and ensure their creativity translates into tangible results.

During the selection process:

- Assess whether they can translate their ideas into action. Do they develop solutions that drive measurable impact, or do they become preoccupied with overly novel or complex ideas that are difficult to implement?
- Evaluate how they prioritise and refine creative solutions. Do they critically assess feasibility and focus on high-impact ideas, or generate too many possibilities without narrowing to those that are most likely to be beneficial?
- Explore how they communicate complex concepts. Do they explain their thinking in ways that are accessible and persuasive, or present ideas that are overly complex or difficult to follow?

High Imaginative, Low Cognitive Ability

Leaders with this combination may be rich in ideas but struggle to convert them into effective execution. Without strong reasoning skills to evaluate feasibility or organise their thinking, they may jump between ideas, present impractical solutions, or pursue novelty without delivering results. While they may excel in ideation, they can face challenges in roles that demand disciplined implementation, logical problem-solving, and structured decision-making. They may have difficulty prioritising ideas, articulating concrete plans, or focusing on outcomes over creativity. These leaders may be better suited to creative or exploratory roles where idea generation is valued and others support execution. Providing decision-making frameworks, implementation support, and structured collaboration with more detail-focused colleagues may help enhance their effectiveness.

During the selection process:

- Evaluate how well they prioritise and refine ideas into viable strategies. Do they focus on the most feasible and relevant options, or generate a wide range of ideas without considering practicality or alignment with organisational needs?
- Assess their ability to translate their ideas into structured implementation plans. Do they create clear plans with defined steps and outcomes, or struggle to move from idea generation to execution and deliver results?
- Explore how they adapt their thinking in response to feedback or structure. Do they revise and refine their ideas when presented with others' input or constraints, or persist with ideas regardless of feasibility or the broader context?

Diligent

Leaders who score highly on the Diligent scale tend to be meticulous, detail-oriented, and committed to delivering high-quality work. They typically excel in roles requiring precision, consistency, and quality control, ensuring tasks are completed with high accuracy and thoroughness. However, when these tendencies are overplayed, they may become overly perfectionistic, highly critical of both themselves and others, struggle to delegate tasks, and get bogged down in minor details at the expense of efficiency. Their effectiveness as leaders may depend on their ability to balance their high standards with adaptability, focusing on what matters most, trusting others with responsibility, and maintaining perspective in dynamic or time-sensitive environments (Hogan et al., 2007).

Overall Results

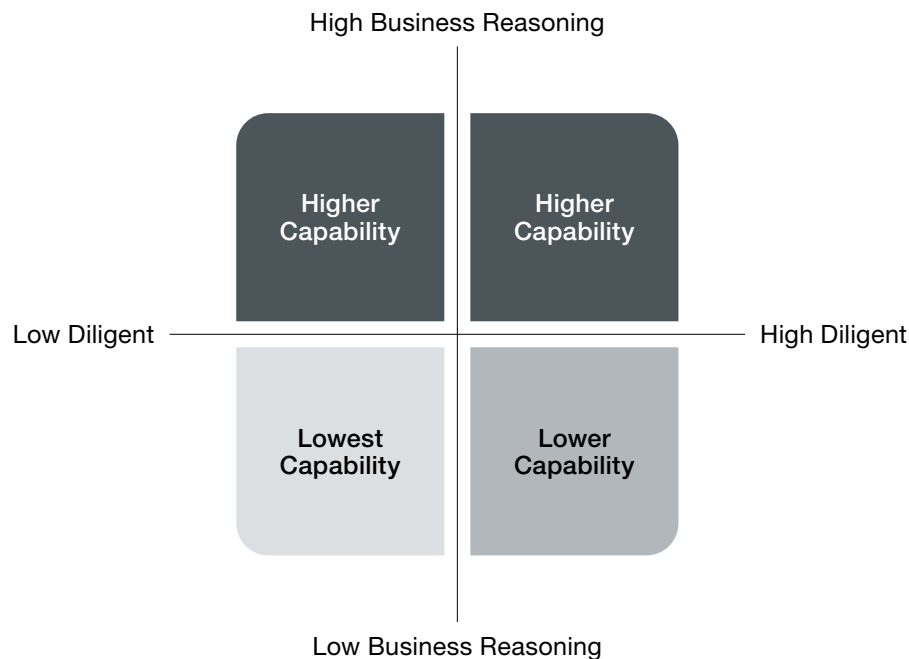


Figure 11. General Impact of Different Score Combinations of Business Reasoning and Diligent Tendencies on Ratings of Leadership Capability.

The highest levels of capability were observed in leaders with high reasoning ability and moderate Diligent tendencies (i.e., neither extremely high nor extremely low Diligent scores). This suggests that leaders who maintain strong attention to detail while balancing flexibility and efficiency may tend to be the most effective when it comes to capability. These individuals may uphold high standards while avoiding perfectionism, enabling them to focus on the most critical priorities, adapt to dynamic situations, and maintain consistent performance without overextending themselves.

Leaders with high Diligent tendencies and low reasoning ability showed relatively lower capability, although not as low as those with low Diligent tendencies and low reasoning ability. Without a strong reasoning ability, high Diligent leaders may struggle to differentiate between essential and minor details, leading to inefficiency and difficulty with prioritisation. Their tendency toward perfectionism can also contribute to a reluctance to delegate, slower execution, and reduced adaptability, particularly in fast-paced or ambiguous environments.

The lowest levels of capability were found in leaders with low Diligent tendencies and low reasoning ability. These leaders may lack consistency, overlook important details, and fail to maintain standards across their work or teams. Without a strong foundation in either diligence or reasoning ability, they may struggle to set clear expectations, monitor performance effectively, or hold others accountable.

Selection Considerations

High Diligent, High Cognitive Ability

Leaders with this combination may excel in roles that require quality control, structured execution, and operational accountability. Their strong attention to detail, paired with the cognitive ability to prioritise and make sound judgements, may make them highly effective in environments where accuracy, consistency, and disciplined planning are essential. Their ability to distinguish between critical and minor issues may help maintain high standards without unnecessary rigidity. However, their effectiveness may still depend on their ability to avoid micromanagement, delegate appropriately, and adapt their approach when flexibility is needed to maintain efficiency.

During the selection process:

- Assess how they balance high standards with efficiency. Do they focus on what matters most and adjust their standards when appropriate, or insist on perfection that slows progress?
- Evaluate their approach to delegation and control. Do they assign responsibility to others and empower them to deliver, or retain excessive oversight and risk micromanagement?
- Explore how they respond when flexibility is required. Do they adapt their approach to meet changing needs, or do they hold too tightly to their usual standards and ways of working, even when adjustment is necessary?

High Diligent, Low Cognitive Ability

Leaders with this combination may find it difficult to thrive in fast-paced, ambiguous, or rapidly changing environments that require flexibility, quick decision-making, and adaptive problem-solving. They may perform better in highly structured roles with clear guidelines, well-defined processes, and limited ambiguity, where their diligence can be directed toward maintaining compliance, ensuring consistency, and executing against established objectives. To increase their effectiveness, they may benefit from coaching in time management, strategic prioritisation, and the development of a broader perspective beyond immediate task execution.

During the selection process:

- Assess their ability to stay focused on outcomes. Do they maintain perspective on key objectives and deliver meaningful results, or become overly absorbed in details that have limited impact on overall performance?
- Evaluate how they adapt their standards to the needs of the situation. Do they apply sound judgement in determining when high precision is necessary, or hold all tasks to the same standard, regardless of priority or context?
- Explore how they delegate and lead through others. Do they show the cognitive bandwidth to prioritise effectively, match task complexity to team capability, and maintain clarity on their role, or do they misjudge task requirements and default to doing everything themselves due to limited planning?

Dutiful

Leaders who score highly on the Dutiful scale tend to be cooperative, respectful of authority, and highly responsive to direction. They often prioritise maintaining harmony and ensuring alignment with the expectations of those in more senior roles. These tendencies can be valuable in structured, hierarchical environments where following guidelines and respecting authority are critical. However, when overused, Dutiful leaders may struggle with independent decision-making and defer excessively to others rather than asserting their own perspectives. Their leadership effectiveness may depend on their ability to balance deference with independent judgement, take initiative when required, and contribute their own insights rather than relying solely on approval or direction from others (Hogan et al., 2007).

Overall Results

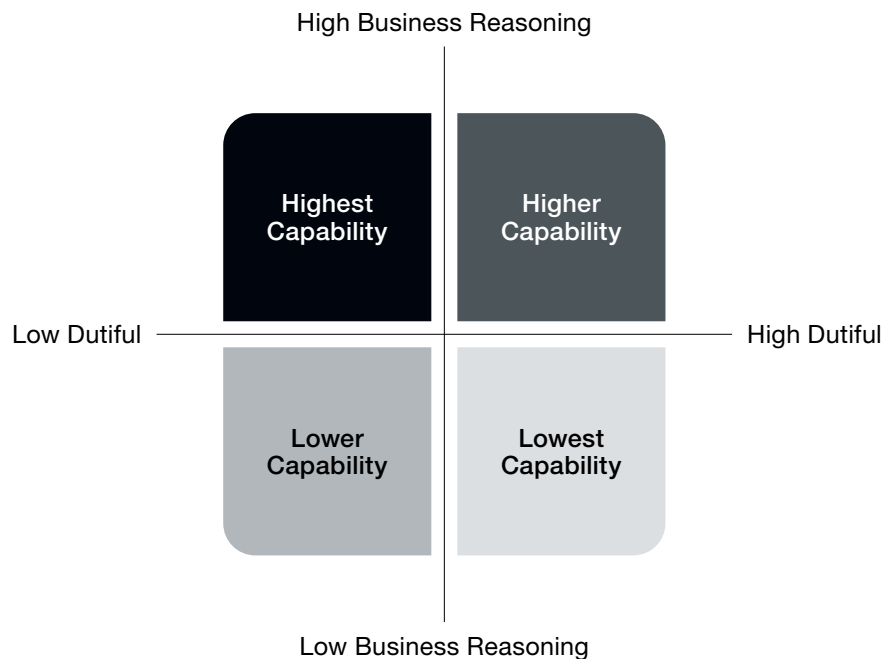


Figure 12. General Impact of Different Score Combinations of Business Reasoning and Dutiful Tendencies on Ratings of Leadership Capability.

The highest levels of capability were observed in leaders with higher reasoning ability and lower Dutiful tendencies. These leaders may be more comfortable asserting their perspectives, challenging assumptions, and making autonomous decisions, particularly in complex or ambiguous situations. When paired with strong reasoning skills, this independence may enable them to critically evaluate direction, take ownership of outcomes, and contribute strategically without over-relying on approval from others.

Leaders with higher Dutiful tendencies and higher reasoning ability also demonstrated relatively strong ratings of capability, although not as high as those with lower Dutiful tendencies and higher reasoning ability. Higher levels of cognitive ability may help Dutiful leaders balance responsiveness to authority with independent judgement, allowing them to critically evaluate directives rather than following them unquestioningly. Their analytical skills may enable them to anticipate potential challenges and contribute thoughtful insights, ensuring that their deference to leadership does not come at the expense of strategic thinking or proactive decision-making.

The lowest levels of capability were observed in leaders with high Dutiful tendencies and low reasoning ability. These leaders may struggle with independent problem-solving, default to compliance without evaluating the merits of a directive, and hesitate to take decisive action in ambiguous or complex situations. This combination may limit their ability to take initiative, make sound decisions, or demonstrate accountability. Leaders with low Dutiful tendencies and low reasoning ability also showed relatively lower capability, although not to the same extent. While they may be more autonomous, their lower reasoning ability may mean that they are more likely to struggle with structured decision-making, navigating authority dynamics, and ensuring alignment with organisational expectations.

Selection Considerations

High Dutiful, High Cognitive Ability

Leaders with this combination may be well-suited to roles that require both responsiveness to direction and strategic thinking (e.g., in regulated industries). Their analytical ability may support effective decision-making and thoughtful contribution, even when working under strong authority structures. However, their leadership impact may be limited if they hesitate to question decisions, challenge inefficiencies, or advocate for alternative approaches. To maximise their effectiveness, they may benefit from building confidence in asserting their views, practising constructive dissent, and taking initiative rather than waiting for approval.

During the selection process:

- Assess how they balance responsiveness with independent judgement. Do they critically evaluate direction and apply their expertise, or follow instructions without questioning whether change is needed?
- Evaluate their willingness to assert their views. Do they speak up when they have a well-reasoned perspective, or defer to authority even when doing so may limit outcomes?
- Explore their comfort with decision ownership. Do they take initiative and stand behind their judgements, or hesitate to act without external validation or approval?

High Dutiful, Low Cognitive Ability

Leaders with this combination may find it challenging to thrive in fast-changing environments requiring adaptability, critical thinking, and self-directed problem-solving. They may perform better in highly structured roles with clear rules, predefined expectations, and strong oversight, where their commitment to following others' direction can be beneficial rather than a liability. However, their long-term effectiveness may depend on developing decision-making confidence, improving analytical skills, and learning to contribute their own perspectives rather than relying solely on external validation.

During the selection process:

- Evaluate their ability to think critically when direction is unclear. Do they assess the merits of guidance and offer input, or follow orders without reflection or judgement?
- Explore how they respond to ambiguity and responsibility. Do they take ownership and demonstrate independent thinking, or avoid decisions and rely on others for certainty?
- Assess their capacity to contribute insights in group settings. Do they participate actively and offer their perspective, or withhold input in favour of compliance and consensus?

Concluding Comments

The study underscores the role that cognitive ability plays in moderating dark-side personality tendencies and their impact on leadership effectiveness. The interplay between cognitive ability and personality derailers is complex, and understanding these dynamics can offer valuable insights for leadership selection. By integrating both cognitive and personality assessments, organisations can make more informed decisions, ensuring that individuals possess not only the intellectual capabilities required for complex decision-making but also the self-regulation and interpersonal effectiveness necessary for sustained success. The interaction between cognitive ability and dark-side personality tendencies offers valuable insights into a leader's likely ability to reflect on their thinking processes (i.e., metacognitive abilities) and how this may influence their reputation as a capable leader in the workplace.

A key takeaway for leadership selection is that cognitive ability may buffer some of the risks associated with high scores on certain dark-side personality tendencies, enabling leaders to channel them more productively. Conversely, when cognitive ability is low, dark-side tendencies may become more pronounced, leading to performance declines, difficulty in decision-making, and challenges in interpersonal relationships. Additionally, for some HDS scales (i.e., Imaginative and Diligent), moderate levels of these personality tendencies, when paired with strong cognitive ability, may be associated with increased performance levels. These findings highlight the importance of considering not only the presence of specific personality tendencies but also their intensity and interaction with cognitive ability when evaluating a leader's capability.

Dark-side personality tendencies, as measured by the HDS, are often described as overplayed strengths rather than inherently negative attributes. The findings from this study demonstrate that these tendencies can contribute positively to leadership performance, particularly when paired with higher levels of cognitive ability. Rather than viewing dark-side tendencies purely as risks, organisations should consider how to strategically harness them to enhance leadership impact. Recognising that cognitive ability can help channel these tendencies productively, leadership selection should focus on identifying potential derailers and understanding how they interact with reasoning skills to shape long-term effectiveness.

Practical implications for leadership selection processes include assessing individual personality tendencies and how they interact with cognitive ability to identify candidates best suited for leadership roles. An effective selection process should consider whether cognitive ability amplifies or mitigates specific personality risks and examine how different combinations of tendencies align with the demands of various leadership positions. By taking this approach, leadership selection moves beyond evaluating tendencies in isolation. Instead, it accounts for the dynamic interplay between cognitive ability and personality tendencies that ultimately shape leadership effectiveness over time.

In conclusion, leadership effectiveness is shaped not by cognitive ability or personality in isolation but by how these factors interact to influence behaviour, decision-making, and performance. This study highlights the importance of assessing these interactions rather than viewing them as independent qualities. By leveraging an integrated assessment approach, organisations can improve their ability to identify leaders who are not only capable of handling complex challenges but also able to regulate and channel their personality tendencies in ways that enhance their leadership impact. Recognising that dark-side personality tendencies (as measured by the HDS) are often overplayed strengths, organisations can shift their focus beyond simply mitigating risks to understanding how these tendencies, when paired with strong cognitive ability, can drive high performance. A selection approach that accounts for these dynamics ensures that leadership decisions are not only about avoiding derailment but also about unlocking the full potential of individuals in leadership roles.

Finally, while the findings presented in this white paper offer valuable insights, they are based on a small sample. Further research must determine whether these results hold across broader populations and contexts. We plan to continue investigating to deepen our understanding and validate these findings in future studies.

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Appendix

This appendix summarises the overall relationship between the interplay between the HBRI, HDS, and Leadership Capability. Key response surface parameters used to interpret how HBRI and each HDS scale jointly relate to perceived leadership capability are also provided.

Overall validity estimates (r)

The correlations reported in Table 1 indicates the overall strength of the relationship between the model and capability ratings.

Table 1

Overall Validity of Polynomial Regression Models Examining the Interaction Between Business Reasoning and HDS Scales on Leadership Capability.

HDS Scale	r
Excitable	0.36
Sceptical	0.36
Cautious	0.36
Reserved	0.37
Leisurely	0.36
Bold	0.36
Mischievous	0.35
Colourful	0.35
Imaginative	0.37
Diligent	0.37
Dutiful	0.39

Polynomial Regression Parameters by HDS Scale

The parameters a1–a4 summarise key features of the response surface.

- a1 represents the overall linear trend along the line where HBRI and the HDS tendency increase together. A statistically significant value indicates that perceived leadership capability systematically increases or decreases as both predictors rise in tandem.
- a2 represents curvature along this same line. A statistically significant value indicates a non linear relationship, such that capability varies exponentially across levels of the predictors rather than changing in a straight line fashion.
- a3 indicates whether the location of the highest or lowest point on the surface is shifted away from equal levels of HBRI and the HDS tendency. A statistically significant value suggests that the most favourable or least favourable combinations occur when one predictor is higher than the other.
- a4 reflects whether there is curvature along the line where HBRI and the HDS tendency differ from one another. A statistically significant value indicates that a mismatch between the two predictors exponentially influences capability.

In this appendix, p values below .05 are typically interpreted as statistically significant.

Table 2*Polynomial Regression Parameters for Business Reasoning and HDS Scales in Relation to Leadership Capability.*

HDS Scale	Parameter	Estimate	Standard Error	p-value
Excitable	a1	3.59	0.98	< .001
	a2	3.67	1.03	< .001
	a3	4.05	0.79	< .001
	a4	0.63	0.75	0.40
Sceptical	a1	2.53	1.04	0.02
	a2	1.60	1.13	0.16
	a3	4.32	0.82	< .001
	a4	0.68	0.68	0.32
Cautious	a1	2.36	0.90	0.01
	a2	2.02	0.77	0.01
	a3	4.72	0.88	<.001
	a4	0.36	0.79	0.65
Reserved	a1	3.26	0.84	<.001
	a2	2.10	0.65	<.001
	a3	3.78	0.91	<.001
	a4	0.52	0.82	0.53
Leisurely	a1	3.79	0.91	<.001
	a2	1.38	0.80	0.09
	a3	3.38	0.90	<.001
	a4	-0.02	0.86	0.98
Bold	a1	3.69	0.82	<.001
	a2	1.81	0.76	0.02
	a3	3.00	0.96	0.001
	a4	0.11	0.68	0.87
Mischievous	a1	3.90	0.93	< .001
	a2	1.03	0.91	0.26
	a3	3.30	0.93	< .001
	a4	0.84	0.84	0.32
Colourful	a1	3.98	0.91	<.001
	a2	0.72	0.92	0.43
	a3	3.28	1.08	0.00
	a4	0.46	1.04	0.66
Imaginative	a1	4.85	0.92	< .001
	a2	-0.60	0.84	0.47
	a3	2.48	0.93	0.01
	a4	0.50	0.79	0.53
Diligent	a1	4.86	1.01	< .001
	a2	-0.09	0.99	0.93
	a3	2.84	0.82	< .001
	a4	-0.21	0.66	0.76
Dutiful	a1	1.76	1.01	0.08
	a2	1.07	0.71	0.13
	a3	4.43	0.83	< .001
	a4	-0.03	0.59	0.96

About Peter Berry Consultancy (PBC)

Peter Berry Consultancy (PBC) is a global leadership advisory firm grounded in the science of personality and organisational psychology. We combine rigorous psychometrics with expert consulting to deliver deeper insight into human behaviour at work.

Through evidence-based diagnostics, research, consulting and coaching, we help organisations make better decisions about talent; strengthening leadership, improving team performance, succession planning and enabling sustainable organisational success.

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