



# “Through the Distorted Lens”: Cognitive Distortions Shaping Diagnostic Judgment, Confidence, and Leadership in Radiology

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## BACKGROUND/PURPOSE

- Radiology demands precise perception, analytical reasoning and calibrated confidence. Cognitive distortions—predictable, irrational thought patterns—can adversely affect diagnostic accuracy, professional interactions, and leadership judgment.
- Common cognitive distortions as they apply to radiology are examined in terms of clinical practice, education, and leadership.

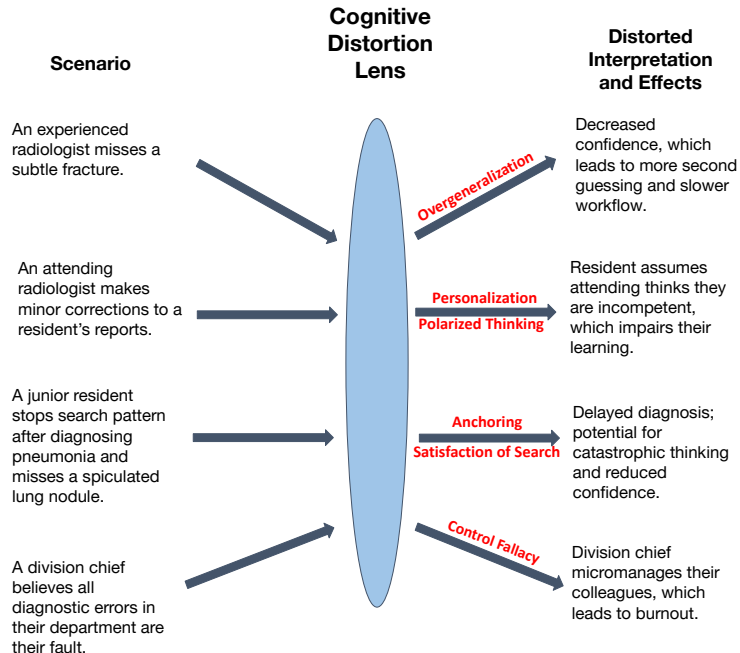
## METHOD

- Key cognitive distortions in radiology:

Polarized Thinking	Overconfidence	Personalization
Satisfaction of Search	Anchoring	Control Fallacy
Overgeneralization	Catastrophizing	Emotional Reasoning

- Cognitive distortions were mapped to radiology specific environments:
  - Image interpretation
  - Trainee education
  - Discrepancy review and professional feedback
  - Leadership decisions

## RESULTS



*Cognitive distortions operate across ALL domains of radiology — from the reading room to the boardroom.*

## MITIGATION FRAMEWORK

- 1. RECOGNIZE** - Cultivate self awareness via reflection and label distortions as they appear.
- 2. REFLECT** - Use peer learning conferences and discrepancy review as opportunities to examine cognitive patterns without blame.
- 3. REFORM** - embed structured feedback tailored to evaluate cognitive patterns into residency training, clinical practice, and administrative leadership culture to create lasting systemic change.

## CONCLUSION

- Cognitive distortions are pervasive and predictable thought patterns that can influence decision making and professional behavior in radiology.
- Recognizing these patterns enhances diagnostic accuracy, improves educational outcomes, and supports sound leadership decisions.
- Implementing structured feedback and reflective peer learning into radiology practice may reduce distorted thinking, fostering safer patient care and more resilient professional cultures.

## REFERENCES

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