Appendices



Chapter 2 Appendices

A.1 Full Table of Included Review Papers

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Abujudeh, H.H.; Kaewlai, R.; McMahon, P.M.; Binder, W.; Novelline, R.A.; Gazelle, G.S.; Thrall, J.H.	guides management decisions: A	2011	Emergency Medicine	Real patients presenting with abdomen pain	0-100% certainty

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Adderley, U. J.; Thompson, C.	Confidence and clinical judgement in community nurses managing venous leg ulceration – A judgement analysis**	2017	Nursing	110 clinical scenarios	1-10 confidence in diagnosis
Albrechtsen, S.S.; Riis, R.G.C.; Amiri, M.; Tanum, G.; Bergdal, O.; Blaabjerg, M.; Simonsen, C.Z.; Kondziella, D.	Impact of MRI on decision- making in ICU patients with disorders of consciousness	2022	ICU	Real patient cases in ICU	5 point likert scale
Ben-Assuli, O.; Sagi, D.; Leshno, M.; Ironi, A.; Ziv, A.	Improving diagnostic accuracy using EHR in emergency departments: A simulation-based study	2015	Emergency Medicine	Simulated patient scenarios with actors for presenting complaints	7 point likert scale of confidence in diagnosis
Benvenuto- Andrade, C.; Dusza, S.W.; Hay, J.L.; Agero, A.L.C.; Halpern, A.C.; Kopf, A.W.; Marghoob, A.A.	Level of confidence in diagnosis: Clinical examination versus dermoscopy examination	2006	Dermatology	20 pairs of clinical and dermoscopic images of lesions	7 point likert scale of confidence in diagnosis (whether benign or malignant)

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Bergl, P. A.; Shukla, N.; Shah, J.; Khan, M.; Patel, J. J.; Nanchal, R. S.	Factors influencing diagnostic accuracy among intensive care unit clinicians – an observational study**	2024	ICU	Surveys during ICU	5 point likert scale
	Influence of case and physician characteristics on perceptions of decision support systems	1999	General Practice / Emergency Medicine	Written cases	1-5 confidence
Blissett, S.; Sibbald, M.; Kok, E.; van Merrienboer, J.	Optimizing self-regulation of performance: is mental effort a cue? **	2018	Internal Medicine	ECG interpretation	0-100% certainty
Brannon, Laura A; Carson, Kimi L	Nursing expertise and information structure influence medical decision making	2003	Nursing	Patient scenarios, manipulated information	0-100% scale confidence in diagnosis
Brezis, Mayer; Orkin- Bedolach, Yael; Fink, Daniel; Kiderman, Alexander	Does Physician's Training Induce Over- confidence That Hampers Disclosing Errors?	2019	Cross Disciplines	Survey with clinical vignette of a girl with urinary infection and penicillin allergy	5 point likert scale

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Cairns, A.W.; Bond, R.R.; Finlay, D.D.; Breen, C.; Guldenring, D.; Gaffney, R.; Gallagher, A.G.; Peace, A.J.; Henn, P.	A computer- human interaction model to improve the diagnostic accuracy and clinical decision- making during 12-lead elec- trocardiogram interpretation	2016	GPs and Undergrads	ECG interpretation	Self-rated confidence 1-10
Calman, N.S.; Hyman, R.B.; Licht, W.	Variability in consultation rates and practitioner level of diagnostic certainty	1992	GP / Family practice	Observational of consultations	Confidence scored based on physician notes by coders
Chartan, C.; Singh, H.; Kr- ishnamurthy, P.; Sur, M.; Meyer, A.; Lutfi, R.; Stark, J.; Thammasit- boon, S.	•	2019	Paediatric residents	Paediatric cases	1-10 Confidence
Chen, Y.; Nagendran, M.; Kilic, Y.; Cavlan, D.; Feather, A.; Westwood, M.; Rowland, E.; Gutteridge, C.; Lambiase, P. D.	The diagnostic certainty levels of junior clinicians: A retrospective cohort study**	2021	Emergency Medicine	Real patient cases deindentified	Qualitative labels translated into %

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Clayton, Dayna A.; Eguchi, Megan M.; Kerr, Kathleen F.; Miyoshi, Kiyofumi; Brunyé, Tad T.; Drew, Trafton; Weaver, Donald L.; Elmore, Joann G.	Are Pathologists Self-Aware of Their Diagnostic Accuracy? Metacognition and the Diagnostic Process in Pathology	2023	Pathology	Diagnosis based on slides for microscopes	6 point scale confidence in correct diagnosis
Cleary, T. J.; Konopasky, A.; La Rochelle, J. S.; Neubauer, B. E.; Durning, S. J.; Artino, A. R.	calibration bias and accuracy	2019	Medical Students	Some of kind of virtual patient sim	Estimations of performance
Costa Filho, G. B.; Moura, A. S.; Brandão, P. R.; Schmidt, H. G.; Mamede, S.	diagnostic	2019	Medical Students / dermatology	12 dermatological images	0-100% scale confidence in diagnosis
Crowley, R. S.; Legowski, E.; Medvedeva, O.; Reitmeyer, K.; Tseytlin, E.; Castine, M.; Jukic, D.; Mello-Thoms, C.	Automated detection of heuristics and biases among pathologists in a computer- based system**	2013	Pathology / Dermatology	Dermatological slides	Scale from -1 to +1

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Davis, D.P.; Campbell, C.J.; Poste, J.C.; Ma, G.	The association between operator confidence and accuracy of ultrasonog- raphy performed by novice emergency physicians	2005	Emergency Medicine	Ultrasound scanning	1-10 scale of confidence of correct test identification
Dreiseitl, S.; Binder, M.	Do physicians value decision support? A look at the effect of decision support systems on physician opinion	2005	Dermatology	25 dermoscopic lesions	1-10 scale of benign to malignant, with higher values interpreted as confident?
Eva, Wayne Kevin	The influence of differentially processing evidence on diagnostic decision-making	2001	Medical Students	Presenting case histories	Probability ratings
Fawver, B.; Thomas, J.L.; Drew, T.; Mills, M.K.; Auffermann, W.F.; Lohse, K.R.; Williams, A.M.	Seeing isn't necessarily believing: Misleading contextual information influences perceptual-cognitive bias in radiologists.	2020	Radiology	16 deidentified musculoskele- tal radiographic cases	5 point likert scale

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Fernandez- Aguilar, Carmen; Martin-Martin, Jose Jesus; Minue Lorenzo, Sergio; Fernandez Ajuria, Alberto	Use of heuristics during the clinical decision process from family care physicians in real conditions.	2022	Primary Care	Real patients presenting with dyspnoea	0-100% scale confidence in diagnosis
Feyzi- Behnagh, R.; Azevedo, R.; Legowski, E.; Reitmeyer, K.; Tseytlin, E.; Crowley, R. S.	Metacognitive scaffolds improve self-judgments of accuracy in a medical intelligent tutoring system**	2014	Pathology / Dermatology	Dermatological slides	6 point scale confidence in correct diagnosis
Frey, J.; Braun, L. T.; Handgriff, L.; Kendziora, B.; Fischer, M. R.; Reincke, M.; Zwaan, L.; Schmidmaier, R.	•	2023	Endocrinology	5 patient cases	1-10 confidence in diagnosis
Friedman, C.; Gatti, G.; Elstein, A.; Franz, T.; Murphy, G.; Wolf, F.	Are clinicians correct when they believe they are correct? Implications for medical decision support	2001	Internal Medicine	36 clinical cases split into 4 equal groups	Confidence in each diagnosis

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Friedman, Charles P.; Gatti, Guido G.; Franz, Timothy M.; Murphy, Gwendolyn C.; Wolf, Fredric M.; Heckerling, Paul S.; Fine, Paul L.; Miller, Thomas M.; Elstein, Arthur S.	Do physicians know when their diagnoses are correct?: Implications for decision support and error reduction	2005	Internal Medicine	2-4 page medical synopses diagnosis	Likelihood to seek assistance to reach a diagnosis
Garbayo, Luciana S.; Harris, David M.; Fiore, Stephen M.; Robinson, Matthew; Kibble, Jonathan D.	A metacognitive confidence calibration (MCC) tool to help medical students scaffold diagnostic reasoning in decision- making during high-fidelity patient simulations	2023	Medical Students	High Fidelity Sim (Cases: Heart Failure, Respiratory Distress, DKA, heat exhaustion)	7 point likert scale of confidence
Gruppen, L; Wolf, F; Billi, J	Information Gathering and Integration as Sources of Error in Diagnostic Decision Making**	1991	Primary Care	Vignettes deciding between two diagnostic alternatives	Probability correct

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Gupta, A. B.; Greene, M. T.; Fowler, K. E.; Chopra, V. I.	Associations Between Hospitalist Shift Busyness, Diagnostic Confidence, and Resource Utilization: A Pilot Study**	2023	Doctors	Questionnaire during shift	1-10 Confidence
Hageman, M. G. J. S.; Bossen, J. K. J.; King, J. D.; Ring, D.	Surgeon confidence in an outpatient setting**	2013	Surgery	Real patients visiting surgery	5 point likert scale
Harvey, C.J.; Halligan, S.; Bartram, C.I.; Hollings, N.; Sahdev, A.; Kingston, K.	Evacuation proctography: A prospective study of diagnostic and therapeutic effects	1999	Radiology	Questionnaires after proctography in 50 patient cases	1-10 confidence in diagnosis
Hausmann, D.; Kiesel, V.; Zimmerli, L.; Schlatter, N.; von Gunten, A.; Wattinger, N.; Rosemann, T.	Sensitivity for multimorbidity: The role of diagnostic uncertainty of physicians when evaluating multimorbid video case-based vignettes	2019	General Practice / Emergency Medicine	Video vignettes	0-100% scale confidence in diagnosis
Hautz, W. E.; Kämmer, J. E.; Schauber, S. K.; Spies, C. D.; Gaissmaier, W.	Diagnostic performance by medical students working individually or in teams**	2015	Medical Students	6 simulated cases of respiratory distress	1-10 Confidence

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Hautz, Wolf E; Schubert, Sebastian; Schauber, Stefan K; Kun- ina_Habenicht, Olga; Hautz, Stefanie C; Kämmer, Juliane E; Eva, Kevin W	Accuracy of self-monitoring: does experience, ability or case difficulty matter?	2019	Medical Students	6 clinical scenarios	10 point scale (0% to 100%)
Heller, Rachael F; Saltzstein, Herbert D; Caspe, William B	Heuristics in medical and non-medical decision-making.	1992	Paediatric residents	Medical and non-medical problems	0-100% scale confidence in diagnosis
Hillson, S.D.; Connelly, D.P.; Liu, Y.	The Effects of Computer- assisted Electrocardio- graphic Interpretation on Physicians' Diagnostic Decisions	1995	Primary Care	ECG interpretation + vignettes (10)	1-10 confidence in diagnosis
Kämmer, Juliane E.; Schauber, Stefan K.; Hautz, Stefanie C.; Stroben, Fabian; Hautz, Wolf E.	Differential diagnosis checklists reduce diagnostic error differentially: A randomised experiment	2021	Medical Students / Emergency Medicine	6 clinical scenarios	10 point scale of confidence

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Katz, I.; O'Brien, B.; Clark, S.; Thompson, C. T.; Schapiro, B.; Azzi, A.; Lilleyman, A.; Boyle, T.; Espartero, L. J. L.; Yamada, M.; Prow, T. W.	Assessment of a Diagnostic Classification System for Management of Lesions to Exclude Melanoma**	2021	Pathology / Dermatology	217 Lesions prepared and stained from patients	1-5 confidence
Keene, T.; Pammer, K.; Lord, B.; Shipp, C.	Dispatch information affects diagnosis in paramedics: an experimental study of applied dual-process theory**	2022	Paramedics	Vignettes in two parts with an intuitive impression and then diagnosis, with or without secondary task distraction	4 point scale
Kostopoulou, Olga; Russo, J. Edward; Keenan, Greg; Delaney, Brendan C.; Douiri, Abdel	Information Distortion in Physicians' Diagnostic Judgments	2012	Primary Care	3 clinical scenarios each with 2 competing diagnoses	21 point likelihood
Kourtidis, Ploutarchos; Nurek, Martine; Delaney, Brendan; Kostopoulou, Olga	Influences of early diagnostic suggestions on clinical reasoning	2022	Family Medicine	2 patient scenarios with or without diagnostic suggestions	10 point visual analogue scale of certainty

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Krupat, Edward; Wormwood, Jolie; Schwartzstein, Richard M; Richards, Jeremy B	Avoiding premature closure and reaching diagnostic accuracy: some key predictive factors	2017	Internal Medicine	4 complex vignettes	1-100 scale of certainty
Kuhn, J.; Mamede, S.; van den Berg, P.; Zwaan, L.; van Peet, P.; Bindels, P.; van Gog, T.	Learning deliberate reflection in medical diagnosis: does learning- by-teaching help?**	2023	General Practice	10 written cases	1-9 confidence
Kuhn, J.; van den Berg, P.; Mamede, S.; Zwaan, L.; Bindels, P.; van Gog, T.	Improving medical residents' self- assessment of their diagnostic accuracy: does feedback help?**	2022	General Practice	12 cases	1-9 confidence
Küper, A.; Lodde, G.; Livingstone, E.; Schadendorf, D.; Krämer, N.	Mitigating cognitive bias with clinical decision support systems: an experimental study	2023	Students and physicians	6 clinical scenarios	7 point scale confidence as well as likelihood of each differential

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Lambe, K.A.; Hevey, D.; Kelly, B.D.	Guided reflection interventions show no effect on diagnostic accuracy in medical students	2018	Medical Students	Fictional patient cases	1-6 scale of confidence in original differential
Leblanc, Vicki R.; Norman, Geoffrey R.; Brooks, Lee R.	Diagnostic Accuracy and	2001	Medical Students	Scenarios with photographs with clinical features	
Levin, P. D.; Idrees, S.; Sprung, C. L.; Weissman, C.; Weiss, Y.; Moses, A. E.; Benenson, S.	and accuracy - an	2012	ICU	Observational in ICU	Certainty of presence of infection when starting patients on antimicrobials
Li, S.; Zheng, J.; Lajoie, S. P.	The relationship between cognitive engagement and students' performance in a simulation-based training environment: an information-processing perspective**	2020	Medical Students	Two patient cases shown	0-100% scale confidence in diagnosis

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Mackenzie, R; Dixon, A K; Keene, G S; Hollingworth, W; Lomas, D J; Villar, R N	Magnetic resonance imaging of the knee: assessment of effectiveness.	1996	Radiology	Observation of knee MRI patients	5 point visual analogue confidence scale
Mamede, S.; Zandbergen, A.; De Carvalho- Filho, M.A.; Choi, G.; Goeijenbier, M.; Van Ginkel, J.; Zwaan, L.; Paas, F.; Schmidt, H.G.	Role of knowledge and reasoning processes as predictors of resident physicians' susceptibility to anchoring bias in diagnostic reasoning: A randomised controlled experiment	2024	Internal Medicine	6 clinical vignettes (with vs without salient distracting features)	Confidence in diagnosis
Mann, Doug	The Relationship between Diagnostic Accuracy and Confidence in Medical Students.	1993	Medical Students / Cardiac	ECG slides - Classification of cardiac dysrhythmias	11 point scale, 0-100%

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Marx, G.; Koens, S.; Von Dem Knesebeck, O.; Scherer, M.	Age and gender differences in diagnostic decision-making of early heart failure: Results of a mixed-methods interview-study using video vignettes	2022	General Practice	Video vignettes	0-100% certainty
Maserejian, N.N.; Lutfey, K.E.; McKinlay, J.B.	Do physicians attend to base rates? prevalence data and statistical discrimination in the diagnosis of coronary heart disease: Physicians and coronary heart disease	2009	Primary Care	Vignettes of CHD	0-100 scale of certainty
McKinlay, J.B.; Lin, T.; Freund, K.; Moskowitz, M.	The unexpected influence of physician attributes on clinical decisions: Results of an experiment	2002	Primary Care	2 Video vignettes	Certainty adhering to diagnosis (% likelihood for each differential)

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Meyer, Ashley ND; Payne, Velma L; Meeks, Derek W; Rao, Radha; Singh, Hardeep	Physicians' diagnostic accuracy, confidence, and resource requests: a vignette study	2013	Internal Medicine	4 case vignettes	0-10 confidence in diagnosis (for each)
Nederhand, M. L.; Tabbers, H. K.; Splinter, T. A. W.; Rikers, R. M. J. P.	The Effect of Performance Standards and Medical Experience on Diagnostic Calibration Accuracy**	2018	General Medicine	6 clinical cases	Confidence in diagnosis (1-10)
Neuge bauer, M.; Ebert, M.; Vogelmann, R.	A clinical decision support system improves antibiotic therapy for upper urinary tract infection in a randomized single-blinded study.	2020	Medical Doctors (Internal Medicine)	Fictive Paper Case	Confidence in Diagnosis (%)
Oskay, A.	Evaluation of thoracic computed tomography interpretation by emergency medicine residents with regards to accuracy and confidence	2023	Emergency Medicine	30 CT scans	1-10 Confidence

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Pusic, M. V.; Chiaramonte, R.; Gladding, S.; Andrews, J. S.; Pecaric, M. R.; Boutis, K.	~	2015	Radiology / medical students	Ankle radiographs	Qualitative labels
Redelmeier, Donald A.; Shafir, Eldar	The Fallacy of a Single Diagnosis	2023	Primary Care	Series of vignettes to diagnosis COVID	% likelhiood
Sanger, P. C.; Simianu, V. V.; Gaskill, C. E.; Armstrong, C. A. L.; Hartzler, A. L.; Lordon, R. J.; Lober, W. B.; Evans, H. L.	Diagnosing surgical site infection using wound photography: a scenario- based study.	2017	Members of Surgical Infection Society	5 online scenarios	Confidence in diagnosis (1-10)
Schoenherr, Jordan Richard; Waechter, Jason; Millington, Scott J	Subjective awareness of ultrasound expertise development: individual experience as a determinant of overconfi- dence	2018	Cardiology	Cardiac ultrasound case studies	6 point scale confidence in correct identification
Sklar, D.P.; Hauswald, M.; Johnson, D.R.	Medical problem solving and uncertainty in the emergency department	1991	Emergency Medicine	Real patients, filling in questionnaire	Visual analogue scale for each differential

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Soares, W. E.; Price, L. L.; Prast, B.; Tarbox, E.; Mader, T. J.; Blanchard, R.	Accuracy screening for ST elevation myocardial infarction in a task-switching simulation**	2019	Emergency Medicine	ECG interpretation	1-5 confidence
Staal, J.; Alsma, J.; Mamede, S.; Olson, A. P. J.; Prins-van Gilst, G.; Geerlings, S. E.; Plesac, M.; Sundberg, M. A.; Frens, M. A.; Schmidt, H. G.; Van den Broek, W. W.; Zwaan, L.	The relationship between time to diagnose and diagnostic accuracy among internal medicine residents: a randomized experiment**	2021	Internal Medicine	8 clinical case	0-100% scale confidence that diagnosis was correct
Staal, J.; Katarya, K.; Speelman, M.; Brand, R.; Alsma, J.; Sloane, J.; Van den Broek, W. W.; Zwaan, L.	Impact of performance and information feedback on medical interns' confidence—accuracy calibration**	2023	Medical Students	X-ray interpretation	0-10 confidence in diagnosis

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Staal, J.; Speelman, M.; Brand, R.; Alsma, J.; Zwaan, L.	Does a suggested diagnosis in a general practitioners' referral question impact diagnostic reasoning: an experimental study	2022	Internal Medicine	6 cases formatted as GP referral letters	0-10 confidence in diagnosis
Tabak, Nili; Bar-Tal, Yoram; Cohen- Mansfield, Jiska	Clinical decision making of experienced and novice nurses	1996	Nursing	Two scenarios	0-100% scale confidence in diagnosis
Thorlacius- Ussing, G.; Bruun, M.; Gjerum, L.; Frederiksen, K. S.; Rhodius- Meester, H. F. M.; Van Der Flier, W. M.; Waldemar, G.; Hasselbalch, S. G.; Nobili, F.	Comparing a Single Clinician Versus a Multi- disciplinary Consensus Conference Approach for Dementia Diagnostics**	2021	Neurology	Real patient evaluations	0-100 Visual analogue scale
Tio, R. A.; Filho, M. A. C.; de Menezes Mota, M. F.; Santanchè, A.; Mamede, S.	The Effect of Information Presentation Order on Residents' Diagnostic Accuracy of Online Simulated Patients With Chest Pain**	2022	Cardiology	12 clinical cases presented in 2 diagnostic rounds (history and EKG)	0-100 confidence

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Trueblood, Jennifer S.; Eichbaum, Quentin; Seegmiller, Adam C.; Stratton, Charles; O'Daniels, Payton; Holmes, William R.	Disentangling prevalence induced biases in medical image decision- making	2021	Medical Students / Imaging	Cell scans (cancer identification)	
van Hout, H.P.J.; Vernooij- Dassen, M.J.; Stalman, W.A.B.	Diagnosing dementia with confidence by GPs	2007	General Practice	Observation of dementia patients	4 point likert scale
van Sassen, C.; Mamede, S.; Bos, M.; van den Broek, W.; Bindels, P.; Zwaan, L.	Do malpractice claim clinical case vignettes enhance diagnostic accuracy and acceptance in clinical reasoning education during GP training?**	2023	General Practice	Cases with and without malpractice claim information	0-100 confidence
Wood, Greg; Batt, Jeremy; Appelboam, Andrew; Harris, Adrian; Wilson, Mark R.	Exploring the Impact of Expertise, Clinical History, and Visual Search on Electrocardiogram Interpretation**	2014	ED	ECG traces and eye tracking	1-10 confidence in diagnosis

Author(s)	Title	Year	Discipline	Methodology	Measure of Confidence
Yang, H.; Thompson, C.; Bland, M.	Effect of improving the realism of simulated clinical judgement tasks on nurses' overconfidence and underconfidence: Evidence from a comparative confidence calibration analysis**	2012	Nursing	Both paper and high fidelity sim scenarios	0-100 confidence
Yang, Huiqin; Thompson, Carl	Nurses' risk assessment judgements: a confidence calibration study: Nurses' risk assessment judgements	2010	Nursing	Risk assessment vignettes	0-100 confidence
Yang, Huiqin; Thompson, Carl; Bland, Martin	The effect of clinical experience, judgment task difficulty and time pressure on nurses' confidence calibration in a high fidelity clinical simulation	2012	Nursing	High Fidelity Sim	0-100 confidence

Table A.1: Full list of papers that were included in the systematic scoping review of papers on confidence and certainty in medical diagness. Papers are arranged in alphabetical order. Studies marked with ** next to their title were included via citation tracking.

B

Chapter 3 Appendices

B.1 Vignette Information Requests

Patient History	Physical Examinations	Testing
History of Presenting Complaint	Take Pulse	Urine Dipstick
Past Medical History	Measure Blood Pressure	ECG
Medications	Assess Respiratory Rate	Abdominal CT Scan
Allergies	Auscultate Lungs	Venous Blood Gas
Family History	Auscultate the Heart	CRP and ESR
Social History	Assess Eyes	Clotting Test
	Measure Temperature	FBC
	Abdomen Examination	Other Biochemistry tests
	Rectal Examination	UREA and Electrolytes
	Neck/Throat Examination	Chest X-Ray
	Assess Head	
	Neurological Exam Record	
	Assess Extremities	

Patient History	Physical Examinations	Testing

Table B.1: Full list of possible information requests that participants can make. This set of information is the same for all cases. The same vignettes and corresponding information are used for the online and think-aloud vignette studies.

B.2 Vignette Marking Scheme (Online and Think-Aloud Studies)

Condition	Abbreviation	Presenting Complaint	Accepted Answers
Temporal Arteritis	TA	Patient is a 68 year old male presented with fever and arthralgia.	Any inflammatory arthritis is accepted
Ulcerative Colitis	UC	Patient is a 60 year old male presented with 2 day history of bloody diarrhoea.	Infectious colitis, ischemic colitis and diverticulitis are also accepted answers.
Miliary Tuberculosis	МТВ	Patient is a 62 year old male admitted for fevers and generalised weakness.	Any TB or lymphoma type is accepted
Aortic Dissection	AD	Patient is a 58 year old female presented with shortness of breath.	Pulmonary embolism and coarctation of the aorta are also accepted answers. Aortic stenosis
Guillain-Barré Syndrome	GBS	Patient is a 67 year old male presented with weakness of the legs for 24 hours.	Cauda Equina Syndrome is also accepted
Thrombotic Thrombocytopenic Purpura	TTP	Patient is a 20 year old male was admitted from an outside hospital with complaints of a headache and slurred speech.	ITP or Meningitis are also accepted.

Table B.2: Marking scheme used to denote differentials that are considered as correct for each of the six patient cases/vignettes. The same marking scheme is applied for online and think-aloud vignette studies. The presenting complaint is shown to participants at the start of the case, before they start seeking information.

B.3 Analysis of Expert Participants

In this section, we present analysis of experienced participants who had completed the same online vignette task that the medical student participants completed. In total, 7 experienced participants completed the experiment. Given this small sample size, we primarily use the expert participants' results as a comparison with the medical student participants' results (presented in the main thesis).

B.3.1 Differentials

We analysed the number of differentials to provide insights into the diagnostic decision process across stages for the expert participants. This allows us to determine if experienced clinicians use a process of deductive narrowing (decreasing differentials) or open-minded broadening (increasing differentials). Analysis of the number of differentials considered by participants at each stage provides little evidence for an overall strategy of deductive narrowing towards a single differential. Instead, participants overall increased the number of the differentials they reported as they received more information (F(2, 18) = 4.02, η^2 G = 0.31, p < .001). Participants reported fewer differentials during the Patient History stage (M = 3.64, SD = 0.85) than during the Physical Examination (M = 4.5, SD = 1) and Testing stages (M = 5.05, SD = 0.95). As can be observed in Figure B.1 below, all expert participants tended to, on average, increase the differentials they were considering across stages.

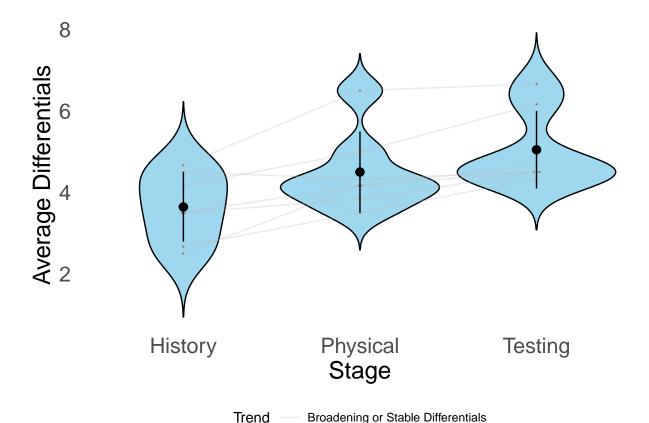


Figure B.1: The average number of differentials after each stage of information seeking (x-axis, History = Patient History, Physical = Physical Examinations, Testing = Testing) for expert participants. The width of the blue area corresponds to the amount of data points that fall within that part of the y-axis, with a wider area meaning a higher concentration of data points. The larger black dots indicate the mean values, whilst the larger black vertical lines indicate standard deviations. The grey dots show individual values at each stage, with grey lines connecting the dots at each stage to represent individual participants' trend across the information seeking stages.

B.3.2 Calibration of Confidence and Accuracy

We first look at whether confidence is calibrated within experienced clinicians during our vignette task. Clinicians had highest accuracy at the Physical Examination stage (M=0.43, SD=0.17) compared to the Testing (M=0.06, SD=0.11) and Physical History stages (M=0.55, SD=0.13). Clinicians reported lower confidence during the Patient History stage (M=0.46, SD=0.17) both compared to during the Physical Examination (M=0.59, SD=0.13) and Testing stages (M=0.59, SD=0.59). Hence, at all stages, clinicians were both more confident and more accurate when compared to medical students on average. When comparing Accuracy (taking into account the likelihood assigned to correct differentials) to Confidence, we find, across stages, clinicians' Confidence was aligned to their Accuracy (see Figure below). As per the previous section, calibration varies as a function of the accuracy measure used, with Differential Accuracy showing evidence for underconfidence if compared against confidence.

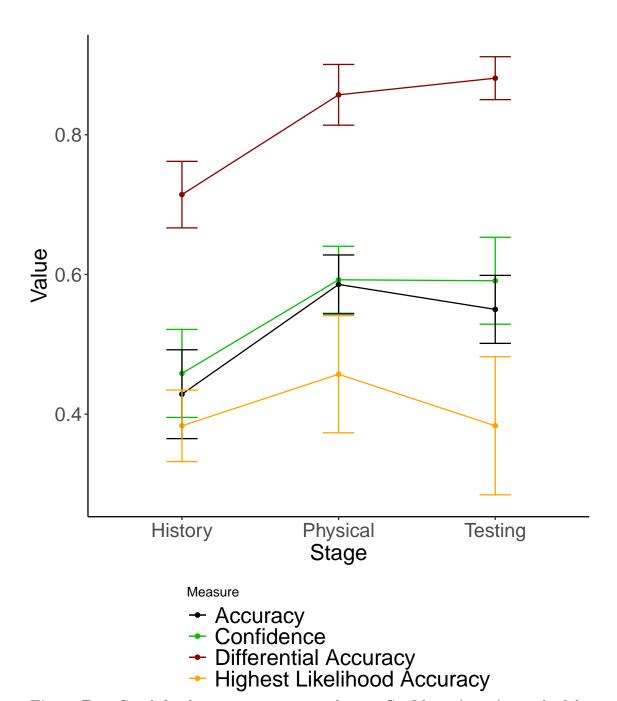


Figure B.2: Graph for the expert participants showing Confidence (green) at each of the three information stages (History = Patient History, Physical = Physical Examinations, Testing = Testing) in comparison to our main accuracy measure (black, likelihood value assigned to the correct diagnosis), the more lenient measure of the proportion of trials where a correct differential was included (dark red) and the stricter measure of the value assigned to the highest likelihood differential if it is correct (orange). Values shown are averaged across participants and cases, with the error bars representing standard error.

B.3.3 Information Seeking Value of Expert Participants

In the main thesis, we use a measure of information seeking value that is defined by splitting all cases completed across participants into two groups: cases where that information was sought at any stage and cases where that information was not sought. For each group, we computed the proportion of trials where the students included a correct differential, and then take the difference between these two values. A positive value would indicate that students were more likely to identify the correct condition with that information rather than without that information. This difference can be considered that information's 'value'. For this measure, we use the medical student participants to both define and measure information value for each participant. With our clinician participants, we can use their information seeking patterns to define information value to them measure the performance of the medical students. We use a similar method as defined above to define each piece of information's 'value': we instead compute the difference accuracy when the experienced clinicians did or did not seek that piece of information. We then calculate the sum of all information values for each case. This gives an overall measure of, on average, how useful the information was that participants sought on each case. However, this measure instead separates the definition of informational value from the information seeking behaviour. We use this measure to replicate our analyses correlating information value with both Confidence Change and Accuracy (as depicted in Figures 3.7B and 3.7D). Below we show the expert participants' information seeking by case in Figure.

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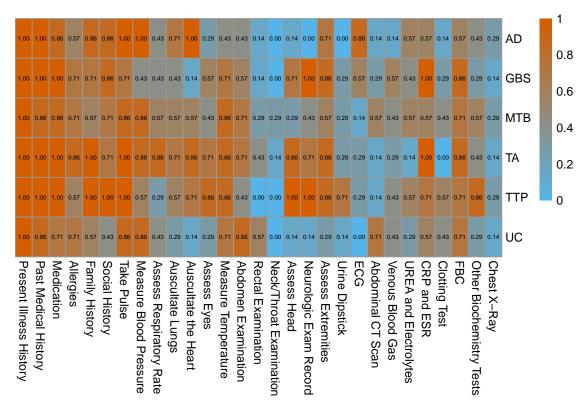


Figure B.3: Visualisation of the proportion of experience clinicians who sought each available piece of information (columns, x-axis) broken down by case (rows, y-axis). Lighter blue colours indicate that fewer participants sought that information for a given case (i.e. towards 0%), whilst lighter orange colours indicate more participants sought that information for a given case (i.e. towards 100%).

We assess the degree to which each participant's accuracy is predicted by the quality of the information they sought using this new measure and find evidence for a positive relationship between accuracy and information value (r(83) = 0.25, 95% CI = [0.04, 0.44], p = 0.02, Figure A), as well as between confidence and information value (r(83) = 0.28, 95% CI = [0.07, 0.46], p = 0.01, Figure B).

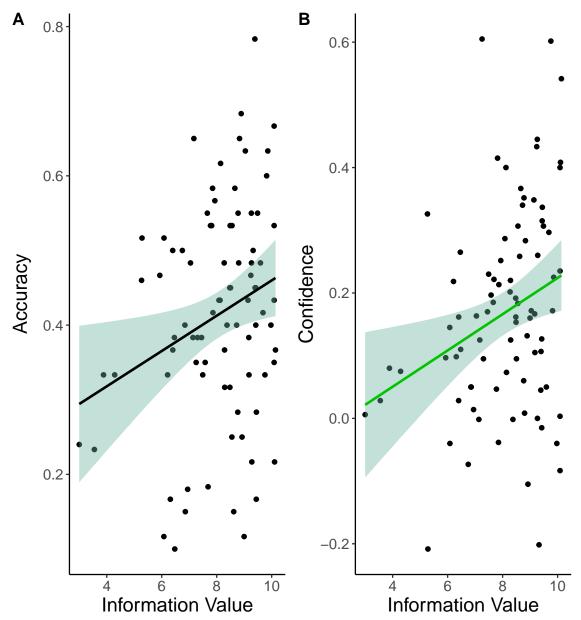


Figure B.4: Scatter plots showing information seeking value (defined using experienced clinicians' information seeking) against our key dependent variables of accuracy (the likelihood assigned to a correct differential if provided, A) and change in confidence (difference between final confidence and initial confidence, B). Information Sought refers to the proportion of available information sought across cases. Information Value refers to the sum of all mean information values across all 6 cases for a given participant. All data points are for a single participant where variables are averaged across all 6 cases they completed.

B.3.4 Information Seeking Variability of Expert Participants

We turn to our analysis of Information Seeking Variability as depicted in Figures 3.9 and 3.10. We surmised from these analyses that diagnostic accuracy was negatively

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correlated with information seeking variability. This meant that medical students were observed to be more accurate in their diagnoses when seeking more similar across cases. In Figure below, we show information seeking variability by accuracy for medical students, as compared with expert clinicians. The highest quartile of medical students had an average accuracy of 0.6, which is slightly higher than the expert clinicians' average accuracy of 0.56. Hence, whilst expert clinicians outperformed the majority of medical students (73,86%), some medical students exhibited better performance than the clinicians.

When comparing Information Seeking Variability, we find the average variability to higher for expert clinicians compared to the highest performing medical students (see Figure below). This would support our account that lower information seeking variability is associated with higher accuracy, but we show that it is not necessarily associated with expertise/experience.

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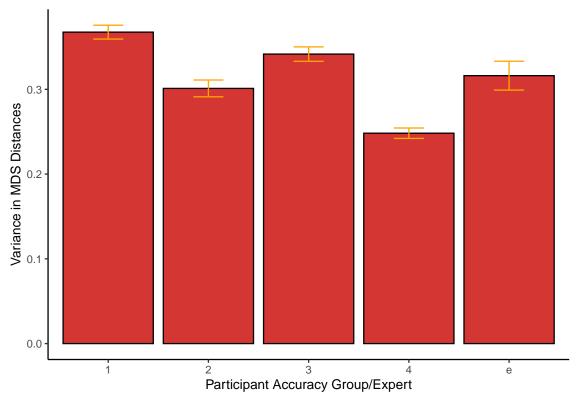


Figure B.5: Average Information Seeking variability by participant accuracy. On the x-axis, groups 1 to 4 represent quartiles of accuracy for the medical student participants (each group containing 21-22 participants). Group e represents the expert clinicians (containing 7 participants). Information seeking variability is calculated using the Dice Coefficient method (Dice, 1945) described in the main thesis for each participant, with average values shown here (y-axis). The orange error bars represent standard error.

B.4 Calibration of Confidence to Alternative Accuracy Measures

B.4.1 Differential Accuracy

When comparing Differential Accuracy (if a correct differential is provided in the participant's list) to Confidence, we find, across stages, participants' Confidence was not aligned to their Accuracy. Instead, we find evidence of underconfidence at all stages. There was evidence of a significant difference between the two at the Patient History (t(84) = 8.24, MDiff = 0.24, p < .001), Physical Examination stage (t(84) = -9.09, MDiff = -0.25, p < .001), and Testing stage (t(84) = -7.74, MDiff = -0.22, p < .001).

In order to examine the observed underconfidence in more detail, we compare confidence and Differential Accuracy by case (the mean values of which can be found in Table 1 of the main thesis). We conducted paired t-tests for each condition's cases by comparing Differential Accuracy and confidence values (at the final Testing stage) to observe if they significantly differ from each other. A p value of less than .05 is interpreted as evidence for overconfidence or underconfidence (depending on the direction of the effect). We observed underconfidence for the GBS case (t(84) = -7.43, MDiff = -0.39, p = < .001), the TA case (t(84) = -5.07, MDiff = -0.25, p = < .001), the TTP case (t(84) = -3.23, MDiff = -0.2, p = < .001) and the UC case (t(82) = -14.83, MDiff = -0.38, p = < .001). The remaining cases did not yield a significant effect.

B.4.2 Highest Likelihood Accuracy

When comparing Highest Likelihood Accuracy (likelihood assigned to the highest likelihood differential if it is correct) to Confidence, we find, across stages, participants' Confidence was not aligned to their Accuracy. Instead, we find evidence of overconfidence at all stages. There was evidence of a significant difference between the two at the Patient History (t(84) = -2.49, MDiff = -0.05, p = 0.01), Physical

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Examination stages (t(84) = 4.45, MDiff = 0.09, p < .001), and Testing stage (t(84) = 6.84, MDiff = 0.16, p < .001).

In order to examine the observed overconfidence in more detail, we compare confidence and Highest Likelihood Accuracy by case (the mean values of which can be found in Table 1 of the main thesis). We conducted paired t-tests for each condition's cases by comparing Highest Likelihood Accuracy and confidence values (at the final Testing stage) to observe if they significantly differ from each other. A p value of less than .05 is interpreted as evidence for overconfidence or underconfidence (depending on the direction of the effect). We observed overconfidence for the AD case (t(84) = 8.92, MDiff = 0.37, p = < .001), the MTB case (t(83) = 7.66, MDiff = 0.35, p = < .001) and the TTP case (t(84) = 4.09, MDiff = 0.21, p = < .001). The remaining cases did not yield a significant effect.

Chapter 4 Appendices

C.1 Debrief Questionnaire from Think-Aloud Study

Each question has a corresponding follow-up question below in case they are not answered by responses to the main questions.

- 1. What's your general approach to making diagnoses? Follow-Up: Do you have those cognitive aids or frameworks you use?
- 2. Do you tend to keep a broad set of differentials in mind? Follow-Up:

 Are there particular situations where having a narrower set would be more useful?
- 3. How do you decide what information or tests to get on a patient? Follow-Up: Would you say you tend to seek information to confirm or to rule out differentials that you have in mind?
- 4. How similar was your diagnostic reasoning on this task versus how you would approach diagnosis in real life? Follow-Up: Was there anything that prevented you from approaching the task as you would in real life?

Chapter 5 Appendices

D.1 Diagnostic Appropriateness Marking Scheme for VR Study

Scenario	Probable/Possible Differentials	Improbable/Unlikely Differentials
Asthma	Asthma / asthma excerbation	Epiglotitis
	Pneumonia / LRTI	Croup
	RSV / Viral URTI	PE
	Foreign Body	
	Anaphylaxis	
	Viral Induced Wheeze	
DKA	DKA	Alcohol ingestion
	URTI / throat infection / tonsillitis	Sickle Cell
	Gastroenteritis / abdominal infection	Inborn errors of metabolism
	Insulin non compliance	

Probable/Possible Differentials	Improbable/Unlikely Differentials	
Sepsis		
Viral infection		
Epilepsy / Febrile Seizure	Fictitious / malingering	
Meningitis / CNS infection / encephalitis	Alcohol withdrawing	
Hypo / hypoglycaemia	Sickle cell	
Non accidential injury (NEA)	Inborn errors of metabolism	
Space occupying lesion (SOL) / tumour		
Pneumonia / LRTI	Anaphylaxis	
URTI / cold / flu	Pleural effusion	
Viral LRTI	Pneumothorax	
Asthma		
Inhaled foreign body (FB)		
	Sepsis Viral infection Epilepsy / Febrile Seizure Meningitis / CNS infection / encephalitis Hypo / hypoglycaemia Non accidential injury (NEA) Space occupying lesion (SOL) / tumour Pneumonia / LRTI URTI / cold / flu Viral LRTI Asthma	

Table D.1: Marking criteria for the VR Study. Differentials are shown for each scenario that were marked as either probable/possible and those categorised as improbable/unlikely. Any differentials not included in this table were marked as incorrect.

E

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                  pkg
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                          0.41
                                                       bookdown2024, bookdown2016
                         7.0.1
## 2
                caret
                                                                              caret
## 3
             cowplot
                         1.1.3
                                                                           cowplot
## 4
          data.table
                        1.16.4
                                                                         datatable
                         2.4.5
## 5
            devtools
                                                                          devtools
                         0.8.4
## 6
             diffcor
                                                                           diffcor
## 7
                        1.10.6
             emmeans
                                                                           emmeans
## 8
          factoextra
                         1.0.7
                                                                        factoextra
## 9
           flextable
                         0.9.7
                                                                         flextable
## 10
                         0.6.0
              ggpubr
                                                                            ggpubr
## 11
                ggsci
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## 12
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                         4.1.8
                                              glmnet2010, glmnet2011, glmnet2023
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##	15	interactions	1.2.0	interactions
##	16	kableExtra	1.4.0	kableExtra
##	17	knitr	1.49	knitr2024, knitr2015, knitr2014
##	18	lme4	1.1.35.5	lme4
##	19	lmerTest	3.1.3	lmerTest
##	20	lmtest	0.9.40	lmtest
##	21	logisticPCA	0.2	logisticPCA
##	22	lsr	0.5.2	lsr
##	23	ltm	1.2.0	ltm
##	24	MASS	7.3.64	MASS
##	25	mgcv	1.9.1	mgcv2011, mgcv2016, mgcv2004, mgcv2017, mgcv2003
##	26	NeuralNetTools	1.5.3	NeuralNetTools
##	27	nnet	7.3.20	nnet
##	28	pheatmap	1.0.12	pheatmap
##	29	pracma	2.4.4	pracma
##	30	pROC	1.18.5	pROC
##	31	psych	2.4.12	psych
##	32	pwr	1.3.0	pwr
##	33	RColorBrewer	1.1.3	RColorBrewer
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##	35	rjson	0.2.23	rjson
##	36	ROCR	1.0.11	ROCR
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##	38	rpart.plot	3.1.2	rpartplot
##	39	rstatix	0.7.2	rstatix
##	40	scales	1.3.0	scales
##	41	stats	4.4.1	stats
##	42	tidyverse	2.0.0	tidyverse

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##	1	bookdown	0.41
##	2	caret	7.0.1
##	3	cowplot	1.1.3
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##	5	devtools	2.4.5
##	6	diffcor	0.8.4
##	7	emmeans	1.10.6
##	8	factoextra	1.0.7
##		flextable	
	10		0.6.0
##	11	ggsci	
##	12		4.1.8
	13	grateful	
	14	gridExtra	
	15	interactions	
	16	kableExtra	
##	17	knitr	1.49
	18		1.1.35.5
	19	lmerTest	3.1.3
	20	lmtest	0.9.40
	21	logisticPCA	
	22	lsr	0.5.2
	23	ltm	1.2.0
	24	MASS	7.3.64
	25	mgcv	
		NeuralNetTools	
	27	nnet	7.3.20
		111100	

##	28	pheatmap	1.0.12	
##	29	pracma	2.4.4	
##	30	pROC	1.18.5	
##	31	psych	2.4.12	
##	32	pwr	1.3.0	
##	33	RColorBrewer	1.1.3	
##	34	reticulate	1.40.0	
##	35	rjson	0.2.23	
##	36	ROCR	1.0.11	
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##	40	scales	1.3.0	
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##	42	tidyverse	2.0.0	
##	43	verification	1.44	
##	44	viridis	0.6.5	
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##	42	@tidyverse

```
## 43
                                                  @verification
## 44
                                                        @viridis
## [[1]]
## Xie Y (2024). _bookdown: Authoring Books and Technical Documents with R
## Markdown_. R package version 0.41,
## <https://github.com/rstudio/bookdown>.
##
## Xie Y (2016). _bookdown: Authoring Books and Technical Documents with R
## Markdown_. Chapman and Hall/CRC, Boca Raton, Florida. ISBN
## 978-1138700109, <a href="https://bookdown.org/yihui/bookdown">.
##
## [[2]]
## Kuhn, Max (2008). "Building Predictive Models in R Using the caret
## Package." _Journal of Statistical Software_, *28*(5), 1-26.
## doi:10.18637/jss.v028.i05 <a href="https://doi.org/10.18637/jss.v028.i05">https://doi.org/10.18637/jss.v028.i05">https://doi.org/10.18637/jss.v028.i05</a>,
## <https://www.jstatsoft.org/index.php/jss/article/view/v028i05>.
##
## [[3]]
## Wilke C (2024). cowplot: Streamlined Plot Theme and Plot Annotations
## for 'ggplot2' . R package version 1.1.3,
## <https://CRAN.R-project.org/package=cowplot>.
##
## [[4]]
## Barrett T, Dowle M, Srinivasan A, Gorecki J, Chirico M, Hocking T,
## Schwendinger B (2024). _data.table: Extension of `data.frame`_. R
## package version 1.16.4,
## <https://CRAN.R-project.org/package=data.table>.
##
## [[5]]
## Wickham H, Hester J, Chang W, Bryan J (2022). devtools: Tools to Make
```

```
## Developing R Packages Easier_. R package version 2.4.5,
## <https://CRAN.R-project.org/package=devtools>.
##
## [[6]]
## Blötner C (2024). diffcor: Fisher's z-Tests Concerning Differences
## Between Correlations_. R package version 0.8.4,
## <https://CRAN.R-project.org/package=diffcor>.
##
## [[7]]
## Wickham H, François R, Henry L, Müller K, Vaughan D (2023). dplyr: A
## Grammar of Data Manipulation_. R package version 1.1.4,
## <https://CRAN.R-project.org/package=dplyr>.
##
## [[8]]
## Lenth R (2024). _emmeans: Estimated Marginal Means, aka Least-Squares
## Means_. R package version 1.10.6,
## <https://CRAN.R-project.org/package=emmeans>.
##
## [[9]]
## Kassambara A, Mundt F (2020). factoextra: Extract and Visualize the
## Results of Multivariate Data Analyses_. R package version 1.0.7,
## <https://CRAN.R-project.org/package=factoextra>.
##
## [[10]]
## Gohel D, Skintzos P (2024). flextable: Functions for Tabular
## Reporting_. R package version 0.9.7,
## <https://CRAN.R-project.org/package=flextable>.
##
## [[11]]
## Kassambara A (2023). _ggpubr: 'ggplot2' Based Publication Ready Plots_.
```

```
## R package version 0.6.0, <a href="https://CRAN.R-project.org/package=ggpubr">https://CRAN.R-project.org/package=ggpubr</a>.
##
## [[12]]
## Rodriguez-Sanchez F, Jackson C (2023). _grateful: Facilitate citation
## of R packages . <a href="https://pakillo.github.io/grateful/">https://pakillo.github.io/grateful/>.</a>
##
## [[13]]
## Xiao N (2024). _ggsci: Scientific Journal and Sci-Fi Themed Color
## Palettes for 'ggplot2'_. R package version 3.2.0,
## <https://CRAN.R-project.org/package=ggsci>.
##
## [[14]]
## Wickham H (2016). _ggplot2: Elegant Graphics for Data Analysis_.
## Springer-Verlag New York. ISBN 978-3-319-24277-4,
## <https://ggplot2.tidyverse.org>.
##
## [[15]]
## Friedman J, Tibshirani R, Hastie T (2010). "Regularization Paths for
## Generalized Linear Models via Coordinate Descent." _Journal of
## Statistical Software , *33*(1), 1-22. doi:10.18637/jss.v033.i01
## <https://doi.org/10.18637/jss.v033.i01>.
##
## Simon N, Friedman J, Tibshirani R, Hastie T (2011). "Regularization
## Paths for Cox's Proportional Hazards Model via Coordinate Descent."
## Journal of Statistical Software, *39*(5), 1-13.
## doi:10.18637/jss.v039.i05 <a href="https://doi.org/10.18637/jss.v039.i05">https://doi.org/10.18637/jss.v039.i05</a>.
##
## Tay JK, Narasimhan B, Hastie T (2023). "Elastic Net Regularization
## Paths for All Generalized Linear Models." Journal of Statistical
## Software , *106*(1), 1-31. doi:10.18637/jss.v106.i01
```

```
## <https://doi.org/10.18637/jss.v106.i01>.
##
## [[16]]
## Auguie B (2017). gridExtra: Miscellaneous Functions for "Grid"
## Graphics . R package version 2.3,
## <https://CRAN.R-project.org/package=gridExtra>.
##
## [[17]]
## Long JA (2024). interactions: Comprehensive, User-Friendly Toolkit for
## Probing Interactions_. doi:10.32614/CRAN.package.interactions
## <https://doi.org/10.32614/CRAN.package.interactions>, R package version
## 1.2.0, <a href="https://cran.r-project.org/package=interactions">https://cran.r-project.org/package=interactions</a>.
##
## [[18]]
## Xie Y (2024). _knitr: A General-Purpose Package for Dynamic Report
## Generation in R_. R package version 1.49, <a href="https://yihui.org/knitr/">https://yihui.org/knitr/>.
##
## Xie Y (2015). Dynamic Documents with R and knitr_, 2nd edition.
## Chapman and Hall/CRC, Boca Raton, Florida. ISBN 978-1498716963,
## <https://yihui.org/knitr/>.
##
## Xie Y (2014). "knitr: A Comprehensive Tool for Reproducible Research in
## R." In Stodden V, Leisch F, Peng RD (eds.), _Implementing Reproducible
## Computational Research . Chapman and Hall/CRC. ISBN 978-1466561595.
##
## [[19]]
## Landgraf AJ, Lee Y (2015). "Dimensionality Reduction for Binary Data
## through the Projection of Natural Parameters." Technical Report 890,
## Department of Statistics, The Ohio State University.
## <http://arxiv.org/abs/1510.06112>.
```

```
##
## [[20]]
## Bates D, Mächler M, Bolker B, Walker S (2015). "Fitting Linear
## Mixed-Effects Models Using lme4." _Journal of Statistical Software_,
## *67*(1), 1-48. doi:10.18637/jss.v067.i01
## <https://doi.org/10.18637/jss.v067.i01>.
##
## [[21]]
## Kuznetsova A, Brockhoff PB, Christensen RHB (2017). "lmerTest Package:
## Tests in Linear Mixed Effects Models." _Journal of Statistical
## Software_, *82*(13), 1-26. doi:10.18637/jss.v082.i13
## <https://doi.org/10.18637/jss.v082.i13>.
##
## [[22]]
## Zeileis A, Hothorn T (2002). "Diagnostic Checking in Regression
## Relationships." _R News_, *2*(3), 7-10.
## <https://CRAN.R-project.org/doc/Rnews/>.
##
## [[23]]
## Navarro D (2015). Learning statistics with R: A tutorial for
## psychology students and other beginners. (Version 0.6)_. University of
## New South Wales, Sydney, Australia. R package version 0.5.1,
## <https://learningstatisticswithr.com>.
##
## [[24]]
## Rizopoulos D (2006). "ltm: An R package for Latent Variable Modelling
## and Item Response Theory Analyses." _Journal of Statistical Software_,
## *17*(5), 1-25. <a href="https://doi.org/10.18637/jss.v017.i05">https://doi.org/10.18637/jss.v017.i05</a>.
##
## [[25]]
```

```
## Zhu H (2024). kableExtra: Construct Complex Table with 'kable' and
## Pipe Syntax_. R package version 1.4.0,
## <https://CRAN.R-project.org/package=kableExtra>.
##
## [[26]]
## Bache S, Wickham H (2022). _magrittr: A Forward-Pipe Operator for R_. R
## package version 2.0.3, <a href="https://CRAN.R-project.org/package=magrittr">https://CRAN.R-project.org/package=magrittr</a>.
##
## [[27]]
## Beck MW (2018). "NeuralNetTools: Visualization and Analysis Tools for
## Neural Networks." _Journal of Statistical Software_, *85*(11), 1-20.
## doi:10.18637/jss.v085.i11 <a href="https://doi.org/10.18637/jss.v085.i11">https://doi.org/10.18637/jss.v085.i11</a>.
##
## [[28]]
## Venables WN, Ripley BD (2002). _Modern Applied Statistics with S_,
## Fourth edition. Springer, New York. ISBN 0-387-95457-0,
## <https://www.stats.ox.ac.uk/pub/MASS4/>.
##
## [[29]]
## Wood SN (2011). "Fast stable restricted maximum likelihood and marginal
## likelihood estimation of semiparametric generalized linear models."
## Journal of the Royal Statistical Society (B), *73*(1), 3-36.
##
## Wood S, N., Pya, S"afken B (2016). "Smoothing parameter and model
## selection for general smooth models (with discussion)." Journal of the
## American Statistical Association , *111*, 1548-1575.
##
## Wood SN (2004). "Stable and efficient multiple smoothing parameter
## estimation for generalized additive models." Journal of the American
## Statistical Association, *99*(467), 673-686.
```

```
##
## Wood S (2017). _Generalized Additive Models: An Introduction with R_, 2
## edition. Chapman and Hall/CRC.
##
## Wood SN (2003). "Thin-plate regression splines." _Journal of the Royal
## Statistical Society (B)_, *65*(1), 95-114.
##
## [[30]]
## Venables WN, Ripley BD (2002). _Modern Applied Statistics with S_,
## Fourth edition. Springer, New York. ISBN 0-387-95457-0,
## <https://www.stats.ox.ac.uk/pub/MASS4/>.
##
## [[31]]
## Kolde R (2019). _pheatmap: Pretty Heatmaps_. R package version 1.0.12,
## <https://CRAN.R-project.org/package=pheatmap>.
##
## [[32]]
## Borchers H (2023). _pracma: Practical Numerical Math Functions_. R
## package version 2.4.4, <a href="https://CRAN.R-project.org/package=pracma">https://CRAN.R-project.org/package=pracma</a>.
##
## [[33]]
## Robin X, Turck N, Hainard A, Tiberti N, Lisacek F, Sanchez J, Müller M
## (2011). "pROC: an open-source package for R and S+ to analyze and
## compare ROC curves." _BMC Bioinformatics_, *12*, 77.
##
## [[34]]
## William Revelle (2024). _psych: Procedures for Psychological,
## Psychometric, and Personality Research_. Northwestern University,
## Evanston, Illinois. R package version 2.4.12,
## <https://CRAN.R-project.org/package=psych>.
```

```
##
## [[35]]
## Champely S (2020). _pwr: Basic Functions for Power Analysis_. R package
## version 1.3-0, <a href="https://CRAN.R-project.org/package=pwr">https://CRAN.R-project.org/package=pwr>.
##
## [[36]]
## Neuwirth E (2022). _RColorBrewer: ColorBrewer Palettes_. R package
## version 1.1-3, <a href="https://CRAN.R-project.org/package=RColorBrewer">https://CRAN.R-project.org/package=RColorBrewer</a>.
##
## [[37]]
## Wickham H, Bryan J (2023). _readxl: Read Excel Files_. R package
## version 1.4.3, <a href="https://CRAN.R-project.org/package=readxl">https://CRAN.R-project.org/package=readxl</a>.
##
## [[38]]
## Ushey K, Allaire J, Tang Y (2024). _reticulate: Interface to 'Python'_.
## R package version 1.40.0,
## <https://CRAN.R-project.org/package=reticulate>.
##
## [[39]]
## Couture-Beil A (2024). rjson: JSON for R . R package version 0.2.23,
## <https://CRAN.R-project.org/package=rjson>.
##
## [[40]]
## Sing T, Sander O, Beerenwinkel N, Lengauer T (2005). "ROCR: visualizing
## classifier performance in R." _Bioinformatics_, *21*(20), 7881.
## <http://rocr.bioinf.mpi-sb.mpg.de>.
##
## [[41]]
## Therneau T, Atkinson B (2023). rpart: Recursive Partitioning and
## Regression Trees . R package version 4.1.23,
```

```
## <https://CRAN.R-project.org/package=rpart>.
##
## [[42]]
## Milborrow S (2024). rpart.plot: Plot 'rpart' Models: An Enhanced
## Version of 'plot.rpart' . R package version 3.1.2,
## <https://CRAN.R-project.org/package=rpart.plot>.
##
## [[43]]
## Kassambara A (2023). _rstatix: Pipe-Friendly Framework for Basic
## Statistical Tests_. R package version 0.7.2,
## <https://CRAN.R-project.org/package=rstatix>.
##
## [[44]]
## Wickham H, Pedersen T, Seidel D (2023). _scales: Scale Functions for
## Visualization_. R package version 1.3.0,
## <https://CRAN.R-project.org/package=scales>.
##
## [[45]]
## R Core Team (2024). _R: A Language and Environment for Statistical
## Computing . R Foundation for Statistical Computing, Vienna, Austria.
## <https://www.R-project.org/>.
##
## [[46]]
## Wickham H (2023). stringr: Simple, Consistent Wrappers for Common
## String Operations . R package version 1.5.1,
## <https://CRAN.R-project.org/package=stringr>.
##
## [[47]]
## Müller K, Wickham H (2023). tibble: Simple Data Frames . R package
## version 3.2.1, <a href="https://CRAN.R-project.org/package=tibble">https://CRAN.R-project.org/package=tibble</a>.
```

```
##
## [[48]]
## Wickham H, Vaughan D, Girlich M (2024). _tidyr: Tidy Messy Data_. R
## package version 1.3.1, <a href="https://CRAN.R-project.org/package=tidyr">https://CRAN.R-project.org/package=tidyr>.
##
## [[49]]
## Wickham H, Averick M, Bryan J, Chang W, McGowan LD, François R,
## Grolemund G, Hayes A, Henry L, Hester J, Kuhn M, Pedersen TL, Miller E,
## Bache SM, Müller K, Ooms J, Robinson D, Seidel DP, Spinu V, Takahashi
## K, Vaughan D, Wilke C, Woo K, Yutani H (2019). "Welcome to the
## tidyverse." Journal of Open Source Software, *4*(43), 1686.
## doi:10.21105/joss.01686 <a href="https://doi.org/10.21105/joss.01686">https://doi.org/10.21105/joss.01686</a>.
##
## [[50]]
## Gilleland E (2024). verification: Weather Forecast Verification
## Utilities . R package version 1.44,
## <https://CRAN.R-project.org/package=verification>.
##
## [[51]]
## Garnier, Simon, Ross, Noam, Rudis, Robert, Camargo, Pedro A, Sciaini,
## Marco, Scherer, Cédric (2024). _viridis(Lite) - Colorblind-Friendly
## Color Maps for R_{\rm o}. doi:10.5281/zenodo.4679423
## <https://doi.org/10.5281/zenodo.4679423>, viridis package version
## 0.6.5, <a href="https://sjmgarnier.github.io/viridis/">https://sjmgarnier.github.io/viridis/</a>.
```

References

- About the College & Emergency Medicine (Dec. 2024). en. URL: https://rcem.ac.uk/the-royal-college-of-emergency-medicine/ (visited on 12/10/2024).
- Abujudeh, Hani H. et al. (Feb. 2011). "Abdominopelvic CT Increases Diagnostic Certainty and Guides Management Decisions: A Prospective Investigation of 584 Patients in a Large Academic Medical Center". In: American Journal of Roentgenology 196.2. Number: 2 Publisher: American Roentgen Ray Society, pp. 238–243. DOI: 10.2214/AJR.10.4467. URL: https://ajronline.org/doi/full/10.2214/AJR.10.4467 (visited on 10/07/2024).
- Adams, J. Stacy (1961). "Reduction of cognitive dissonance by seeking consonant information". In: *The Journal of Abnormal and Social Psychology* 62.1. Number: 1 Place: US Publisher: American Psychological Association, pp. 74–78. DOI: 10.1037/h0047029.
- Ais, Joaquín et al. (Jan. 2016). "Individual consistency in the accuracy and distribution of confidence judgments". In: Cognition 146, pp. 377–386. DOI: 10.1016/j.cognition.2015.10.006. URL: https://www.sciencedirect.com/science/article/pii/S0010027715300846 (visited on 10/07/2024).
- Aiyer, Sriraj et al. (July 2023). "Outcomes Affect Evaluations of Decision Quality: Replication and Extensions of Baron and Hershey's (1988) Outcome Bias Experiment 1". en. In: International Review of Social Psychology 36.1, p. 12. DOI: 10.5334/irsp.751. URL: https://account.rips-irsp.com/index.php/up-j-irsp/article/view/751

(visited on 11/29/2024).

- Akaishi, Rei et al. (Jan. 2014). "Autonomous Mechanism of Internal Choice Estimate Underlies Decision Inertia". English. In: *Neuron* 81.1. Number: 1 Publisher: Elsevier, pp. 195–206. DOI: 10.1016/j.neuron.2013.10.018. URL: https://www.cell.com/neuron/abstract/S0896-6273(13)00921-5 (visited on 11/29/2024).
- Albrechtsen, Simon S. et al. (Mar. 2022). "Impact of MRI on decision-making in ICU patients with disorders of consciousness". In: *Behavioural Brain Research* 421, p. 113729. DOI: 10.1016/j.bbr.2021.113729. URL: https://www.sciencedirect.com/science/article/pii/S0166432821006173 (visited on 10/07/2024).
- Alby, Francesca, Cristina Zucchermaglio, and Mattia Baruzzo (Jan. 2015). "Diagnostic Decision Making in Oncology: Creating Shared Knowledge and Managing Complexity". In: *Mind, Culture, and Activity* 22.1. Number: 1 Publisher: Routledge __eprint: https://doi.org/10.1080/10749039.2014.981642, pp. 4–22. DOI:

```
10.1080/10749039.2014.981642. URL:
https://doi.org/10.1080/10749039.2014.981642 (visited on 11/20/2024).
Alicke, Mark D. and Olesya Govorun (2005). "The Better-Than-Average Effect". In:
The Self in Social Judgment. Num Pages: 22. Psychology Press.
Armstrong, Bonnie A et al. (May 2023). "Cognitive biases in surgery: systematic
review". In: British Journal of Surgery 110.6. Number: 6, pp. 645-654. DOI:
10.1093/bjs/znad004. URL: https://doi.org/10.1093/bjs/znad004 (visited on
10/28/2024).
Arocha, José F. and Vimla L. Patel (Oct. 1995). "Novice Diagnostic Reasoning in
Medicine: Accounting for Evidence". EN. In: The Journal of the Learning Sciences.
Publisher: Lawrence Erlbaum Associates, Inc. DOI: 10.1207/s15327809jls0404_1.
URL: https://www.tandfonline.com/doi/abs/10.1207/s15327809jls0404_1
(visited on 11/18/2024).
```

- Aron, Adrian et al. (2024). "Diagnostic momentum in physical therapy clinical reasoning". en. In: Journal of Evaluation in Clinical Practice 30.1. Number: 1
 __eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/jep.13884, pp. 73-81. DOI: 10.1111/jep.13884. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/jep.13884 (visited on 11/26/2024).
- Baker, G. Ross et al. (May 2004). "The Canadian Adverse Events Study: the incidence of adverse events among hospital patients in Canada". en. In: *CMAJ* 170.11. Number: 11 Publisher: CMAJ Section: Research article, pp. 1678–1686. DOI: 10.1503/cmaj.1040498. URL: https://www.cmaj.ca/content/170/11/1678 (visited on 10/07/2024).
- Balsdon, Tarryn, Valentin Wyart, and Pascal Mamassian (Apr. 2020). "Confidence controls perceptual evidence accumulation". en. In: *Nature Communications* 11.1. Number: 1 Publisher: Nature Publishing Group, p. 1753. DOI: 10.1038/s41467-020-15561-w. URL: https://www.nature.com/articles/s41467-020-15561-w (visited on 11/26/2024).
- Baron, Jonathan and John C. Hershey (1988). "Outcome bias in decision evaluation". In: *Journal of Personality and Social Psychology* 54.4. Number: 4 Place: US Publisher: American Psychological Association, pp. 569–579. DOI: 10.1037/0022-3514.54.4.569.
- Bean, William Bennett (1954). "Sir William Osler: Aphorisms From His Bedside Teachings and Writings". In: *British Journal for the Philosophy of Science* 5.18. Publisher: Taylor and Francis, 172–173.
- Ben-Assuli, Ofir et al. (June 2015). "Improving diagnostic accuracy using EHR in emergency departments: A simulation-based study". In: *Journal of Biomedical Informatics* 55, pp. 31-40. DOI: 10.1016/j.jbi.2015.03.004. URL: https://www.sciencedirect.com/science/article/pii/S1532046415000477 (visited on 10/07/2024).
- Benvenuto-Andrade, Cristiane et al. (May 2006). "Level of Confidence in Diagnosis: Clinical Examination Versus Dermoscopy Examination". en-US. In: Dermatologic Surgery 32.5. Number: 5, p. 738. URL: https://journals.lww.com/dermatologicsurgery/abstract/2006/05000/level_of_confidence_in_diagnosis__clinical.34.aspx (visited on 10/07/2024).

(visited on 10/07/2024).

- Berger, Roni (Apr. 1, 2015). "Now I see it, now I don't: researcher's position and reflexivity in qualitative research". In: *Qualitative Research* 15.2. Publisher: SAGE Publications, pp. 219–234. DOI: 10.1177/1468794112468475. URL: https://doi.org/10.1177/1468794112468475.
- Bergl, Paul A. et al. (Feb. 2024). "Factors influencing diagnostic accuracy among intensive care unit clinicians an observational study". en. In: *Diagnosis* 11.1. Number: 1 Publisher: De Gruyter, pp. 31–39. DOI: 10.1515/dx-2023-0026. URL: https://www.degruyter.com/document/doi/10.1515/dx-2023-0026/html (visited on 10/07/2024).
- Berner, Eta S. and Mark L. Graber (May 2008). "Overconfidence as a Cause of Diagnostic Error in Medicine". In: *The American Journal of Medicine*. Diagnostic Error: Is Overconfidence the Problem 121.5, Supplement. Number: 5, Supplement, S2–S23. DOI: 10.1016/j.amjmed.2008.01.001. URL: https://www.sciencedirect.com/science/article/pii/S0002934308000405 (visited on 10/07/2024).
- Berner, Eta S. and Richard S. Maisiak (Sept. 1999). "Influence of Case and Physician Characteristics on Perceptions of Decision Support Systems". In: *Journal of the American Medical Informatics Association* 6.5. Number: 5, pp. 428–434. DOI: 10.1136/jamia.1999.0060428. URL:
- https://doi.org/10.1136/jamia.1999.0060428 (visited on 10/07/2024).
 Berwick, Donald M. and Andrew D. Hackbarth (Apr. 2012). "Eliminating Waste in US Health Care". In: *JAMA* 307.14. Number: 14, pp. 1513–1516. DOI: 10.1001/jama.2012.362. URL: https://doi.org/10.1001/jama.2012.362
- Bhise, Viraj, Ashley N.D. Meyer, et al. (Aug. 2017). "Errors in Diagnosis of Spinal Epidural Abscesses in the Era of Electronic Health Records". en. In: *The American Journal of Medicine* 130.8. Number: 8, pp. 975–981. DOI: 10.1016/j.amjmed.2017.03.009. URL: https://linkinghub.elsevier.com/retrieve/pii/S0002934317303236 (visited on 10/05/2024).
- Bhise, Viraj, Suja S. Rajan, et al. (Jan. 2018). "Defining and Measuring Diagnostic Uncertainty in Medicine: A Systematic Review". en. In: Journal of General Internal Medicine 33.1. Number: 1, pp. 103–115. DOI: 10.1007/s11606-017-4164-1. URL: https://doi.org/10.1007/s11606-017-4164-1 (visited on 10/07/2024).
- Boag, Russell J. et al. (Feb. 2023). "Evidence accumulation modelling in the wild: understanding safety-critical decisions". English. In: *Trends in Cognitive Sciences* 27.2. Publisher: Elsevier, pp. 175–188. DOI: 10.1016/j.tics.2022.11.009. URL: https://www.cell.com/trends/cognitive-sciences/abstract/S1364-6613(22)00294-7 (visited on 12/31/2024).
- Boldt, Annika and Nick Yeung (Feb. 2015). "Shared Neural Markers of Decision Confidence and Error Detection". en. In: *Journal of Neuroscience* 35.8. Number: 8 Publisher: Society for Neuroscience Section: Brief Communications, pp. 3478–3484. DOI: 10.1523/JNEUROSCI.0797-14.2015. URL:
 - https://www.jneurosci.org/content/35/8/3478 (visited on 10/07/2024).
- Bontempo, Allyson C. (June 1, 2023). "Patient attitudes toward clinicians' communication of diagnostic uncertainty and its impact on patient trust". In: SSM Qualitative Research in Health 3, p. 100214. DOI: 10.1016/j.ssmqr.2022.100214.

```
URL:
```

- https://www.sciencedirect.com/science/article/pii/S2667321522001767.
- Brannon, Laura A and Kimi L Carson (Nov. 2003). "Nursing expertise and information structure influence medical decision making". In: *Applied Nursing Research* 16.4. Number: 4, pp. 287–290. DOI: 10.1016/j.apnr.2003.08.004. URL: https://www.sciencedirect.com/science/article/pii/S0897189703000788 (visited on 10/07/2024).
- Braun, Virginia and Victoria Clarke (Jan. 2006). "Using thematic analysis in psychology". EN. In: *Qualitative Research in Psychology*. URL: https://www.tandfonline.com/doi/abs/10.1191/1478088706qp063oa (visited on 01/10/2025).
- Brezis, Mayer et al. (Dec. 2019). "Does Physician's Training Induce Overconfidence That Hampers Disclosing Errors?" en-US. In: Journal of Patient Safety 15.4. Number: 4, p. 296. DOI: 10.1097/PTS.0000000000000555. URL: https://journals.lww.com/journalpatientsafety/abstract/2019/12000/does_physician_s_training_induce_overconfidence.10.aspx (visited on 10/07/2024).
- Brody, H. and D. B. Waters (Mar. 1980). "Diagnosis is treatment". eng. In: *The Journal of Family Practice* 10.3, pp. 445–449.
- Brooks, Lee R., Vicki R. LeBlanc, and Geoffrey R. Norman (Mar. 2000). "On the Difficulty of Noticing Obvious Features in Patient Appearance". en. In: *Psychological Science* 11.2. Number: 2 Publisher: SAGE Publications Inc, pp. 112–117. DOI: 10.1111/1467-9280.00225. URL: https://doi.org/10.1111/1467-9280.00225 (visited on 11/25/2024).
- Brown, Scott, Mark Steyvers, and Eric-Jan Wagenmakers (Dec. 2009). "Observing evidence accumulation during multi-alternative decisions". In: *Journal of Mathematical Psychology* 53.6, pp. 453–462. DOI: 10.1016/j.jmp.2009.09.002. URL:
 - https://www.sciencedirect.com/science/article/pii/S0022249609001163 (visited on 12/19/2024).
- Busemeyer, Jerome R. et al. (Mar. 1, 2019). "Cognitive and Neural Bases of Multi-Attribute, Multi-Alternative, Value-based Decisions". In: *Trends in Cognitive Sciences* 23.3. Publisher: Elsevier PMID: 30630672, pp. 251-263. DOI: 10.1016/j.tics.2018.12.003. URL: https://www.cell.com/trends/cognitive-sciences/abstract/S1364-6613(18)30284-5.
- Calman, Neil, R Hyman, and W Licht (Aug. 1992). "Variability in Consultation Rates and Practitioner Level of Diagnostic Certainty". In: *The Journal of family practice* 35, pp. 31–8.
- Carpenter, Christopher R., Ali S. Raja, and Michael D. Brown (2015). "Overtesting and the Downstream Consequences of Overtreatment: Implications of "Preventing Overdiagnosis" for Emergency Medicine". en. In: Academic Emergency Medicine 22.12. Number: 12 _eprint:
 - https://onlinelibrary.wiley.com/doi/pdf/10.1111/acem.12820, pp. 1484–1492. DOI: 10.1111/acem.12820. URL:
 - https://onlinelibrary.wiley.com/doi/abs/10.1111/acem.12820 (visited on 10/07/2024).
- Chapman, Gretchen B., George R. Bergus, and Arthur S. Elstein (1996). "Order of information affects clinical judgment". In: Journal of Behavioral Decision Making

```
9.3, pp. 201–211. DOI:
   10.1002/(SICI)1099-0771(199609)9:3<201::AID-BDM229>3.0.CO;2-J.
Charles, Lucie and Nick Yeung (2019). "Dynamic sources of evidence supporting
   confidence judgments and error detection". In: Journal of Experimental Psychology:
   Human Perception and Performance 45.1. Number: 1 Place: US Publisher:
   American Psychological Association, pp. 39–52. DOI: 10.1037/xhp0000583.
Chartan, Corey et al. (Oct. 2019). "Isolating red flags to enhance diagnosis (I-RED):
   An experimental vignette study". In: International Journal for Quality in Health
   Care 31.8. Number: 8, G97-G102. DOI: 10.1093/intqhc/mzz082. URL:
   https://doi.org/10.1093/intqhc/mzz082 (visited on 10/07/2024).
Chase, William G. and Herbert A. Simon (Jan. 1973). "Perception in chess". In:
   Cognitive Psychology 4.1, pp. 55-81. DOI: 10.1016/0010-0285(73)90004-2. URL:
   https://www.sciencedirect.com/science/article/pii/0010028573900042
   (visited on 12/19/2024).
Cheng, Joey T. et al. (2021). "The social transmission of overconfidence". In: Journal of
   Experimental Psychology: General 150.1. Number: 1 Place: US Publisher: American
   Psychological Association, pp. 157–186. DOI: 10.1037/xge0000787.
Churchland, Anne K and Jochen Ditterich (Dec. 1, 2012). "New advances in
   understanding decisions among multiple alternatives". In: Current Opinion in
   Neurobiology. Decision making 22.6, pp. 920–926. DOI:
   10.1016/j.conb.2012.04.009. URL:
   https://www.sciencedirect.com/science/article/pii/S0959438812000670.
Clayton, Dayna A. et al. (Feb. 2023). "Are Pathologists Self-Aware of Their Diagnostic
   Accuracy? Metacognition and the Diagnostic Process in Pathology". en. In: Medical
   Decision Making 43.2. Number: 2 Publisher: SAGE Publications Inc STM,
   pp. 164-174. DOI: 10.1177/0272989X221126528. URL:
   https://doi.org/10.1177/0272989X221126528 (visited on 10/07/2024).
Coderre, S et al. (2003a). "Diagnostic reasoning strategies and diagnostic success". en.
   In: Medical Education 37.8. Number: 8 eprint:
   https://onlinelibrary.wiley.com/doi/pdf/10.1046/j.1365-2923.2003.01577.x,
   pp. 695-703. DOI: 10.1046/j.1365-2923.2003.01577.x. URL: https:
   //onlinelibrary.wiley.com/doi/abs/10.1046/j.1365-2923.2003.01577.x
   (visited on 10/07/2024).
Coderre, S et al. (2003b). "Diagnostic reasoning strategies and diagnostic success". In:
   Medical education 37.8. Publisher: Wiley Online Library, 695–703.
Costa Filho, Galileu B. et al. (Aug. 2019). "Effects of deliberate reflection on diagnostic
   accuracy, confidence and diagnostic calibration in dermatology". en. In: Perspectives
   on Medical Education 8.4. Number: 4, pp. 230–236. DOI:
   10.1007/s40037-019-0522-5. URL:
   https://doi.org/10.1007/s40037-019-0522-5 (visited on 10/07/2024).
Cox, Caitríona, Thea Hatfield, and Zoë Fritz (Dec. 2024). "Role of communicating
   diagnostic uncertainty in the safety-netting process: insights from a vignette study".
   en. In: BMJ Quality & Safety 33.12, pp. 769–779. DOI:
   10.1136/bmjqs-2023-017037. URL:
   https://qualitysafety.bmj.com/lookup/doi/10.1136/bmjqs-2023-017037
   (visited on 12/21/2024).
Croskerry, Pat (Sept. 2009). "Clinical cognition and diagnostic error: applications of a
   dual process model of reasoning". en. In: Advances in Health Sciences Education
```

```
Croskerry, Pat (June 2013). "From mindless to mindful practice-cognitive bias and
   clinical decision making". eng. In: The New England Journal of Medicine 368.26.
   Number: 26, pp. 2445–2448. DOI: 10.1056/NEJMp1303712.
Croskerry, Pat et al. (Feb. 2014). "Deciding About Fast and Slow Decisions". en-US. In:
   Academic Medicine 89.2. Number: 2, p. 197. DOI: 10.1097/ACM.000000000000121.
   URL: https://journals.lww.com/academicmedicine/fulltext/2014/02000/
   Deciding_About_Fast_and_Slow_Decisions.7.aspx (visited on 11/19/2024).
Crowley, Rebecca S. et al. (Aug. 2013). "Automated detection of heuristics and biases
   among pathologists in a computer-based system". en. In: Advances in Health
   Sciences Education 18.3. Number: 3, pp. 343–363. DOI:
   10.1007/s10459-012-9374-z. URL:
   https://doi.org/10.1007/s10459-012-9374-z (visited on 10/07/2024).
Custers, Eugène J. F. M. (Aug. 2013). "Medical Education and Cognitive Continuum
   Theory: An Alternative Perspective on Medical Problem Solving and Clinical
   Reasoning". en-US. In: Academic Medicine 88.8, p. 1074. DOI:
   10.1097/ACM.0b013e31829a3b10. URL:
   https://journals.lww.com/academicmedicine/abstract/2013/08000/medical_
   education_and_cognitive_continuum_theory_.18.aspx (visited on 12/21/2024).
Cutler, Brian L., Steven D. Penrod, and Hedy R. Dexter (1989). "The eyewitness, the
   expert psychologist, and the jury." en. In: Law and Human Behavior 13.3. Number:
   3, pp. 311-332. DOI: 10.1007/BF01067032. URL:
   https://doi.apa.org/doi/10.1007/BF01067032 (visited on 10/07/2024).
Dahm, Maria R. et al. (Feb. 1, 2023). "Communication of Diagnostic Uncertainty in
   Primary Care and Its Impact on Patient Experience: an Integrative Systematic
   Review". In: Journal of General Internal Medicine 38.3, pp. 738–754. DOI:
   10.1007/s11606-022-07768-y. URL:
   https://doi.org/10.1007/s11606-022-07768-y.
Dave, Neha et al. (Apr. 2022). "Interventions targeted at reducing diagnostic error:
   systematic review". en. In: BMJ Quality & Safety 31.4. Publisher: BMJ Publishing
   Group Ltd Section: Systematic review, pp. 297–307. DOI:
   10.1136/bmjqs-2020-012704. URL:
   https://qualitysafety.bmj.com/content/31/4/297 (visited on 12/23/2024).
Desender, Kobe, Annika Boldt, and Nick Yeung (May 2018). "Subjective Confidence
   Predicts Information Seeking in Decision Making". en. In: Psychological Science
   29.5. Number: 5 Publisher: SAGE Publications Inc, pp. 761–778. DOI:
   10.1177/0956797617744771. URL: https://doi.org/10.1177/0956797617744771
   (visited on 10/07/2024).
DeVries, Melissa (2017). "Improving Diagnostic Accuracy in Health Care". en. In.
Dice, Lee R. (1945). "Measures of the Amount of Ecologic Association Between
   Species". In: Ecology 26.3. Number: 3 Publisher: [Wiley, Ecological Society of
   America], pp. 297–302. DOI: 10.2307/1932409. URL:
   https://www.jstor.org/stable/1932409 (visited on 11/06/2024).
Dreiseitl, Stephan and Michael Binder (Jan. 2005). "Do physicians value decision
   support? A look at the effect of decision support systems on physician opinion". In:
   Artificial Intelligence in Medicine 33.1. Number: 1, pp. 25–30. DOI:
   10.1016/j.artmed.2004.07.007. URL:
```

14.1. Number: 1, pp. 27–35. DOI: 10.1007/s10459-009-9182-2. URL: https://doi.org/10.1007/s10459-009-9182-2 (visited on 11/19/2024).

01/02/2025).

(visited on 11/19/2024).

```
https://www.sciencedirect.com/science/article/pii/S0933365704001071 (visited on 10/07/2024).
```

- Dunlosky, John (2013). "Strengthening the Student Toolbox: Study Strategies to Boost Learning". en. In: *American Educator* 37.3. Number: 3 Publisher: American Federation of Teachers ERIC Number: EJ1021069, pp. 12–21. URL: https://eric.ed.gov/?id=EJ1021069 (visited on 10/07/2024).
- Ely, John W., Mark L. Graber, and Pat Croskerry (Mar. 2011). "Checklists to Reduce Diagnostic Errors". en-US. In: *Academic Medicine* 86.3. Number: 3, p. 307. DOI: 10.1097/ACM.0b013e31820824cd. URL:
 - $\verb|https://journals.lww.com/academicmedicine/abstract/2011/03000/\\ checklists_to_reduce_diagnostic_errors.17.aspx (visited on $11/25/2024)$.$
- Endsley, Mica R. (Mar. 1995). "Toward a Theory of Situation Awareness in Dynamic Systems". en. In: *Human Factors* 37.1. Number: 1 Publisher: SAGE Publications Inc, pp. 32–64. DOI: 10.1518/001872095779049543. URL: https://doi.org/10.1518/001872095779049543 (visited on 12/10/2024).
- Eva, Kevin W (2001). "The influence of differentially processing evidence on diagnostic decision-making". PhD thesis. McMaster University. URL:
 - https://macsphere.mcmaster.ca/bitstream/11375/7187/1/fulltext.pdf (visited on 12/02/2024).
- Eva, Kevin W. and John P. W. Cunnington (2006). "The difficulty with experience: Does practice increase susceptibility to premature closure?" en. In: Journal of Continuing Education in the Health Professions 26.3. _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1002/chp.69, pp. 192–198. DOI: 10.1002/chp.69. URL: https://onlinelibrary.wiley.com/doi/abs/10.1002/chp.69 (visited on
- Fawver, Bradley et al. (2020). "Seeing isn't necessarily believing: Misleading contextual information influences perceptual-cognitive bias in radiologists". In: *Journal of Experimental Psychology: Applied* 26.4. Number: 4 Place: US Publisher: American Psychological Association, pp. 579–592. DOI: 10.1037/xap0000274.
- Featherston, Rebecca et al. (Oct. 2020). "Decision making biases in the allied health professions: A systematic scoping review". en. In: *PLOS ONE* 15.10. Number: 10 Publisher: Public Library of Science, e0240716. DOI:
 - 10.1371/journal.pone.0240716. URL: https://journals.pone.org/plosone/article?id=10.1371/journal.pone.0240716
- Fenwick, Samuel (1891). *Medical Diagnosis*. en. Google-Books-ID: GvRaAAAAQAAJ. J. and A. Churchill.
- Fernández-Aguilar, Carmen et al. (2022). "Use of heuristics during the clinical decision process from family care physicians in real conditions". en. In: *Journal of Evaluation in Clinical Practice* 28.1. Number: 1 _eprint:
 - https://onlinelibrary.wiley.com/doi/pdf/10.1111/jep.13608, pp. 135-141. DOI: 10.1111/jep.13608. URL:
 - https://onlinelibrary.wiley.com/doi/abs/10.1111/jep.13608 (visited on 10/07/2024).
- Feyzi-Behnagh, Reza et al. (Mar. 2014). "Metacognitive scaffolds improve self-judgments of accuracy in a medical intelligent tutoring system". en. In: *Instructional Science* 42.2. Number: 2, pp. 159–181. DOI:

10.1007/s11251-013-9275-4. URL:

```
Fischer, Helen, Astrid Kause, and Markus Huff (Dec. 2024). Intellectual Humility Links
   to Metacognitive Ability. en-us. DOI: 10.31234/osf.io/w8d3y. URL:
   https://osf.io/w8d3y (visited on 12/31/2024).
Fischer, Peter, Stefan Schulz-Hardt, and Dieter Frey (2008). "Selective exposure and
   information quantity: How different information quantities moderate decision
   makers' preference for consistent and inconsistent information". In: Journal of
   Personality and Social Psychology 94.2. Place: US Publisher: American
   Psychological Association, pp. 231–244. DOI: 10.1037/0022-3514.94.2.94.2.231.
Flavell, John H. (1979). "Metacognition and cognitive monitoring: A new area of
   cognitive-developmental inquiry". In: American Psychologist 34.10. Place: US
   Publisher: American Psychological Association, pp. 906–911. DOI:
   10.1037/0003-066X.34.10.906.
Fleming, Stephen M. and Nathaniel D. Daw (Jan. 2017). "Self-evaluation of
   decision-making: A general Bayesian framework for metacognitive computation." en.
   In: Psychological Review 124.1. Number: 1, pp. 91–114. DOI: 10.1037/rev0000045.
   URL: https://doi.apa.org/doi/10.1037/rev0000045 (visited on 10/07/2024).
Fraundorf, Scott H. et al. (Aug. 2023). "Cognitive perspectives on maintaining
   physicians' medical expertise: III. Strengths and weaknesses of self-assessment". en.
   In: Cognitive Research: Principles and Implications 8.1, p. 58. DOI:
   10.1186/s41235-023-00511-z. URL:
   https://doi.org/10.1186/s41235-023-00511-z (visited on 12/19/2024).
Friedman, Charles, Guido Gatti, Arthur Elstein, et al. (2001). "Are Clinicians Correct
   When They Believe They are Correct? Implications for Medical Decision Support".
   In: MEDINFO 2001. IOS Press, pp. 454–458. DOI:
   10.3233/978-1-60750-928-8-454. URL:
   https://ebooks.iospress.nl/doi/10.3233/978-1-60750-928-8-454 (visited on
   11/12/2024).
Friedman, Charles P., Guido G. Gatti, Timothy M. Franz, et al. (Apr. 2005). "Do
   physicians know when their diagnoses are correct?" en. In: Journal of General
   Internal Medicine 20.4. Number: 4, pp. 334–339. DOI:
   10.1111/j.1525-1497.2005.30145.x. URL:
   https://doi.org/10.1111/j.1525-1497.2005.30145.x (visited on 10/07/2024).
Garbayo, Luciana S. et al. (Mar. 2023). "A metacognitive confidence calibration (MCC)
   tool to help medical students scaffold diagnostic reasoning in decision-making
   during high-fidelity patient simulations". In: Advances in Physiology Education 47.1.
   Number: 1 Publisher: American Physiological Society, pp. 71–81. DOI:
   10.1152/advan.00156.2021. URL:
   https://journals.physiology.org/doi/full/10.1152/advan.00156.2021
   (visited on 10/07/2024).
Gehlbach, Hunter, Carly D. Robinson, and Angus Fletcher (Oct. 2024). "The illusion of
   information adequacy". en. In: PLOS ONE 19.10. Number: 10 Publisher: Public
   Library of Science, e0310216. DOI: 10.1371/journal.pone.0310216. URL: https:
   //journals.plos.org/plosone/article?id=10.1371/journal.pone.0310216
   (visited on 12/10/2024).
Gherman, Sabina and Marios G. Philiastides (Feb. 2015). "Neural representations of
   confidence emerge from the process of decision formation during perceptual choices".
```

https://doi.org/10.1007/s11251-013-9275-4 (visited on 10/07/2024).

```
In: NeuroImage 106, pp. 134-143. DOI: 10.1016/j.neuroimage.2014.11.036. URL:
   https://www.sciencedirect.com/science/article/pii/S1053811914009537
   (visited on 10/07/2024).
Gigerenzer, Gerd (Jan. 2008). "Why Heuristics Work". en. In: Perspectives on
   Psychological Science 3.1. Number: 1 Publisher: SAGE Publications Inc, pp. 20–29.
   DOI: 10.1111/j.1745-6916.2008.00058.x. URL:
   https://doi.org/10.1111/j.1745-6916.2008.00058.x (visited on 11/19/2024).
Gilhooly, K. J. (1990). "Cognitive psychology and medical diagnosis". en. In: Applied
   Cognitive Psychology 4.4. Number: 4 eprint:
   https://onlinelibrary.wiley.com/doi/pdf/10.1002/acp.2350040404, pp. 261–272. DOI:
   10.1002/acp.2350040404. URL:
   https://onlinelibrary.wiley.com/doi/abs/10.1002/acp.2350040404 (visited
   on 10/28/2024).
Goh, Ethan et al. (Oct. 2024). "Large Language Model Influence on Diagnostic
   Reasoning: A Randomized Clinical Trial". In: JAMA Network Open 7.10, e2440969.
   DOI: 10.1001/jamanetworkopen.2024.40969. URL:
   https://doi.org/10.1001/jamanetworkopen.2024.40969 (visited on
   12/23/2024).
Gooch, Rebecca A. and Jeremy M. Kahn (Feb. 2014). "ICU Bed Supply, Utilization,
   and Health Care Spending: An Example of Demand Elasticity". In: JAMA 311.6.
   Number: 6, pp. 567-568. DOI: 10.1001/jama.2013.283800. URL:
   https://doi.org/10.1001/jama.2013.283800 (visited on 12/10/2024).
Graber, Mark L. et al. (July 2012). "Cognitive interventions to reduce diagnostic error:
   a narrative review". en. In: BMJ Quality & Safety 21.7. Number: 7 Publisher: BMJ
   Publishing Group Ltd Section: Narrative review, pp. 535–557. DOI:
   10.1136/bmjqs-2011-000149. URL:
   https://qualitysafety.bmj.com/content/21/7/535 (visited on 10/07/2024).
Graz, Bertrand et al. (June 2005). "Prognosis or "Curabo Effect?": Physician
   Prediction and Patient Outcome of Surgery for Low Back Pain and Sciatica". en-US.
   In: Spine 30.12. Number: 12, p. 1448. DOI: 10.1097/01.brs.0000166508.88846.b3.
   URL: https://journals.lww.com/spinejournal/abstract/2005/06150/
   prognosis_or__curabo_effect___physician.18.aspx (visited on 10/28/2024).
Greig, Paul R., Helen Higham, and Emma Vaux (Sept. 2015). "Lack of standardisation
   between specialties for human factors content in postgraduate training: an analysis
   of specialty curricula in the UK". en. In: BMJ Quality & Safety 24.9. Number: 9
   Publisher: BMJ Publishing Group Ltd Section: Short report, pp. 558–560. DOI:
   10.1136/bmjqs-2014-003684. URL:
   https://qualitysafety.bmj.com/content/24/9/558 (visited on 10/07/2024).
Groopman, Jerome (2010). How Doctors Think. en. Scribe Publications.
Groot, Adriaan D. De and Adrianus Dingeman de Groot (1978). Thought and Choice in
   Chess. en. Google-Books-ID: EI4gr42NwDQC. Walter de Gruyter.
```

Gupta, Ashwin B. et al. (Oct. 2023). "Associations Between Hospitalist Shift Busyness, Diagnostic Confidence, and Resource Utilization: A Pilot Study". en-US. In: *Journal*

Gathering and Integration as Sources of Error in Diagnostic Decision Making". en. In: *Medical Decision Making* 11.4. Number: 4 Publisher: SAGE Publications Inc

Gruppen, Larry D., Fredric M. Wolf, and John E. Billi (Dec. 1991). "Information

https://doi.org/10.1177/0272989X9101100401 (visited on 10/07/2024).

STM, pp. 233-239. DOI: 10.1177/0272989X9101100401. URL:

```
of Patient Safety 19.7. Number: 7, p. 447. DOI: 10.1097/PTS.000000000001157. URL: https://journals.lww.com/journalpatientsafety/abstract/2023/10000/associations_between_hospitalist_shift_busyness,.5.aspx?context=latestarticles (visited on 10/07/2024).
```

- Hageman, Michiel G. J. S. et al. (Dec. 2013). "Surgeon Confidence in an Outpatient Setting". en. In: *HAND* 8.4. Number: 4 Publisher: SAGE Publications Inc, pp. 430–433. DOI: 10.1007/s11552-013-9533-6. URL:
 - https://doi.org/10.1007/s11552-013-9533-6 (visited on 10/07/2024).
- Hall, Katherine H (2002). "Reviewing intuitive decision-making and uncertainty: the implications for medical education". en. In: Medical Education 36.3. Number: 3 __eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1046/j.1365-2923.2002.01140.x, pp. 216-224. DOI: 10.1046/j.1365-2923.2002.01140.x. URL: https://onlinelibrary.wiley.com/doi/abs/10.1046/j.1365-2923.2002.01140.x (visited on 10/07/2024).
- Hampton, J R et al. (May 1975). "Relative contributions of history-taking, physical examination, and laboratory investigation to diagnosis and management of medical outpatients." en. In: *BMJ* 2.5969. Number: 5969, pp. 486–489. DOI: 10.1136/bmj.2.5969.486. URL: https://www.bmj.com/lookup/doi/10.1136/bmj.2.5969.486 (visited on 11/18/2024).
- Han, Paul K. J., William M. P. Klein, and Neeraj K. Arora (Nov. 2011). "Varieties of Uncertainty in Health Care: A Conceptual Taxonomy". en. In: Medical Decision Making 31.6. Number: 6 Publisher: SAGE Publications Inc STM, pp. 828–838. DOI: 10.1177/0272989X10393976. URL: https://doi.org/10.1177/0272989X10393976 (visited on 11/19/2024).
- Hancock, Jason and Karen Mattick (Feb. 2020). "Tolerance of ambiguity and psychological well-being in medical training: A systematic review". In: Medical Education 54.2. Number: 2 Publisher: John Wiley and Sons, Ltd, pp. 125–137. DOI: 10.1111/medu.14031. URL: https://asmepublications.onlinelibrary.wiley.com/doi/full/10.1111/medu.14031 (visited on 11/20/2024).
- Harvey, Christopher J. et al. (Apr. 1999). "Evacuation Proctography: A Prospective Study of Diagnostic and Therapeutic Effects". In: Radiology 211.1. Number: 1 Publisher: Radiological Society of North America, pp. 223–227. DOI: 10.1148/radiology.211.1.r99mr16223. URL: https://pubs.rsna.org/doi/abs/10.1148/radiology.211.1.r99mr16223 (visited on 10/07/2024).
- Hausmann, Daniel et al. (Apr. 2019). "Sensitivity for multimorbidity: The role of diagnostic uncertainty of physicians when evaluating multimorbid video case-based vignettes". en. In: *PLOS ONE* 14.4. Number: 4 Publisher: Public Library of Science, e0215049. DOI: 10.1371/journal.pone.0215049. URL: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0215049 (visited on 10/07/2024).
- Hautz, Wolf E, Sebastian Schubert, et al. (2019). "Accuracy of self-monitoring: does experience, ability or case difficulty matter?" en. In: *Medical Education* 53.7. Number: 7 _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/medu.13801, pp. 735–744. DOI: 10.1111/medu.13801. URL:

```
https://onlinelibrary.wiley.com/doi/abs/10.1111/medu.13801 (visited on 10/07/2024).
```

- Hautz, Wolf E., Juliane E. Kämmer, et al. (May 2019). "Diagnostic error increases mortality and length of hospital stay in patients presenting through the emergency room". en. In: Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine 27.1. Number: 1, p. 54. DOI: 10.1186/s13049-019-0629-z. URL: https://doi.org/10.1186/s13049-019-0629-z (visited on 10/07/2024).
- Hechtlinger, Shahar et al. (2024). "The psychology of life's most important decisions". In: *American Psychologist*. Place: US Publisher: American Psychological Association, No Pagination Specified–No Pagination Specified. DOI: 10.1037/amp0001439.
- Heereman, J. and P. Walla (Dec. 2011). "Stress, Uncertainty and Decision Confidence". en. In: *Applied Psychophysiology and Biofeedback* 36.4. Number: 4, pp. 273–279. DOI: 10.1007/s10484-011-9167-9. URL:
 - https://doi.org/10.1007/s10484-011-9167-9 (visited on 10/07/2024).
- Heller, Rachael F., Herbert D. Saltzstein, and William B. Caspe (Feb. 1992). "Heuristics in Medical and Non-Medical Decision-Making". en. In: *The Quarterly Journal of Experimental Psychology Section A* 44.2. Number: 2 Publisher: SAGE Publications, pp. 211–235. DOI: 10.1080/02724989243000019. URL: https://doi.org/10.1080/02724989243000019 (visited on 10/07/2024).
- Hémon, Brivael et al. (Aug. 2020). "Speaking Up About Errors in Routine Clinical Practice: A Simulation-Based Intervention With Nursing Students". In: Clinical Simulation in Nursing. Patient Safety 45, pp. 32-41. DOI: 10.1016/j.ecns.2020.03.003. URL: https://www.sciencedirect.com/science/article/pii/S1876139920300207 (visited on 10/07/2024).
- Henmon, V. A. C. (1911). "The relation of the time of a judgment to its accuracy". In: *Psychological Review* 18.3. Number: 3 Place: US Publisher: The Review Publishing Company, pp. 186–201. DOI: 10.1037/h0074579.
- Hewson, Mariana G. et al. (Aug. 1996). "Strategies for managing uncertainty and complexity". en. In: *Journal of General Internal Medicine* 11.8, pp. 481–485. DOI: 10.1007/BF02599044. URL: https://doi.org/10.1007/BF02599044 (visited on 12/31/2024).
- Higgs, Joy, Gail M. Jensen, et al., eds. (2019). Clinical reasoning in the health professions. en. Fourth edition. Edinburgh London New York: Elsevier.
- Higgs, Joy, Mark A Jones, et al. (2008). Clinical Reasoning in the Health Professions E-Book: Clinical Reasoning in the Health Professions E-Book. Elsevier Health Sciences.
- Higham, Helen et al. (Aug. 2019). "Observer-based tools for non-technical skills assessment in simulated and real clinical environments in healthcare: a systematic review". en. In: *BMJ Quality & Safety* 28.8. Number: 8 Publisher: BMJ Publishing Group Ltd Section: Systematic review, pp. 672–686. DOI: 10.1136/bmjqs-2018-008565. URL:
 - https://qualitysafety.bmj.com/content/28/8/672 (visited on 10/07/2024).
- Hillson, Steven D., Donald P. Connelly, and Yuanli Liu (June 1995). "The Effects of Computer-assisted Electrocardiographic Interpretation on Physicians' Diagnostic Decisions". en. In: *Medical Decision Making* 15.2. Number: 2 Publisher: SAGE

- Publications Inc STM, pp. 107–112. DOI: 10.1177/0272989X9501500202. URL: https://doi.org/10.1177/0272989X9501500202 (visited on 10/07/2024).
- Humphries, Claire et al. (Dec. 2018). "Investigating clinical handover and healthcare communication for outpatients with chronic disease in India: A mixed-methods study". en. In: *PLOS ONE* 13.12. Ed. by Mojtaba Vaismoradi. Number: 12, e0207511. DOI: 10.1371/journal.pone.0207511. URL:
 - https://dx.plos.org/10.1371/journal.pone.0207511 (visited on 10/11/2024).
- Hunt, L. T., N. D. Daw, et al. (Aug. 2021). "Formalizing planning and information search in naturalistic decision-making". en. In: *Nature Neuroscience* 24.8. Publisher: Nature Publishing Group, pp. 1051–1064. DOI: 10.1038/s41593-021-00866-w. URL: https://www.nature.com/articles/s41593-021-00866-w (visited on 12/19/2024).
- Hunt, Laurence T., Robb B. Rutledge, et al. (Nov. 2016). "Approach-Induced Biases in Human Information Sampling". en. In: *PLOS Biology* 14.11. Number: 11 Publisher: Public Library of Science, e2000638. DOI: 10.1371/journal.pbio.2000638. URL: https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.2000638 (visited on 10/07/2024).
- Investigation report (June 2021). Investigation report: Delayed Recognition of Acute Aortic Dissection. en-gb. URL:
 - https://www.hssib.org.uk/patient-safety-investigations/delayed-recognition-of-acute-aortic-dissection/investigation-report/ (visited on 11/20/2024).
- Investigation report (Mar. 2022). Investigation report: Missed detection of lung cancer on chest X-rays of patients being seen in primary care. en-gb. URL: https://www.hssib.org.uk/patient-safety-investigations/missed-detection-of-lung-cancer-on-chest-x-rays-of-patients-being-seen-in-primary-care/investigation-report/ (visited on 11/20/2024).
- Jans, Carley et al. (June 2023). "Examining the impact of virtual reality on clinical decision making An integrative review". en. In: Nurse Education Today 125, p. 105767. DOI: 10.1016/j.nedt.2023.105767. URL: https://linkinghub.elsevier.com/retrieve/pii/S0260691723000618 (visited on 10/11/2024).
- Jaspan, Oren et al. (Mar. 2022). "Improving the Relationship Between Confidence and Competence: Implications for Diagnostic Radiology Training From the Psychology and Medical Literature". In: *Academic Radiology* 29.3. Number: 3, pp. 428–438. DOI: 10.1016/j.acra.2020.12.006. URL:
 - https://www.sciencedirect.com/science/article/pii/S1076633220306991 (visited on 10/07/2024).
- Jonas, Eva et al. (2001). "Confirmation bias in sequential information search after preliminary decisions: An expansion of dissonance theoretical research on selective exposure to information". In: *Journal of Personality and Social Psychology* 80.4. Number: 4 Place: US Publisher: American Psychological Association, pp. 557–571. DOI: 10.1037/0022-3514.80.4.557.
- Jonassen, David H. (Mar. 1997). "Instructional design models for well-structured and III-structured problem-solving learning outcomes". en. In: *Educational Technology Research and Development* 45.1. Number: 1, pp. 65–94. DOI: 10.1007/BF02299613. URL: http://link.springer.com/10.1007/BF02299613 (visited on 10/05/2024).

```
Joseph, Guy-Marie and Vimla L. Patel (Feb. 1990). "Domain Knowledge and Hypothesis Genenation in Diagnostic Reasoning". en. In: Medical Decision Making 10.1. Number: 1 Publisher: SAGE Publications Inc STM, pp. 31–44. DOI: 10.1177/0272989X9001000107. URL: https://doi.org/10.1177/0272989X9001000107 (visited on 11/14/2024).
```

- Kaanders, Paula et al. (Apr. 2022). "Humans actively sample evidence to support prior beliefs". In: *eLife* 11. Ed. by Valentin Wyart, Michael J Frank, and Konstantinos Tsetsos. Publisher: eLife Sciences Publications, Ltd, e71768. DOI: 10.7554/eLife.71768. URL: https://doi.org/10.7554/eLife.71768 (visited on 10/07/2024).
- Kahneman, Daniel (Oct. 2011). *Thinking, Fast and Slow.* en. Google-Books-ID: ZuKTvERuPG8C. Farrar, Straus and Giroux.
- Kämmer, Juliane E., Wolf E. Hautz, et al. (Aug. 2017). "The Potential of Collective Intelligence in Emergency Medicine: Pooling Medical Students' Independent Decisions Improves Diagnostic Performance". en. In: *Medical Decision Making* 37.6. Number: 6 Publisher: SAGE Publications Inc STM, pp. 715–724. DOI: 10.1177/0272989X17696998. URL: https://doi.org/10.1177/0272989X17696998 (visited on 11/12/2024).
- Kämmer, Juliane E., Stefan K. Schauber, et al. (2021). "Differential diagnosis checklists reduce diagnostic error differentially: A randomised experiment". en. In: *Medical Education* 55.10. Number: 10 _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/medu.14596, pp. 1172–1182. DOI: 10.1111/medu.14596. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/medu.14596 (visited on 10/07/2024).
- Kassirer, Jerome P. (Oct. 1983). "Teaching Clinical Medicine by Iterative Hypothesis Testing". In: New England Journal of Medicine 309.15. Number: 15 Publisher: Massachusetts Medical Society _eprint: https://www.nejm.org/doi/pdf/10.1056/NEJM198310133091511, pp. 921–923. DOI: 10.1056/NEJM198310133091511. URL: https://www.nejm.org/doi/full/10.1056/NEJM198310133091511 (visited on 11/18/2024).
- Katz, Jay (1984). "Why Doctors Don't Disclose Uncertainty". In: *The Hastings Center Report* 14.1. Number: 1 Publisher: [Hastings Center, Wiley], pp. 35–44. DOI: 10.2307/3560848. URL: https://www.jstor.org/stable/3560848 (visited on 10/07/2024).
- Keifenheim, Katharina E. et al. (Sept. 2015). "Teaching history taking to medical students: a systematic review". en. In: *BMC Medical Education* 15.1. Number: 1, p. 159. DOI: 10.1186/s12909-015-0443-x. URL: https://doi.org/10.1186/s12909-015-0443-x (visited on 11/18/2024).
- Kiani, Roozbeh, Leah Corthell, and Michael N. Shadlen (Dec. 2014). "Choice Certainty Is Informed by Both Evidence and Decision Time". English. In: Neuron 84.6. Number: 6 Publisher: Elsevier, pp. 1329–1342. DOI: 10.1016/j.neuron.2014.12.015. URL: https://www.cell.com/neuron/abstract/S0896-6273(14)01096-4 (visited on 10/07/2024).
- Klayman, Joshua and Young-won Ha (1987). "Confirmation, disconfirmation, and information in hypothesis testing". In: *Psychological Review* 94.2. Number: 2 Place:

```
US Publisher: American Psychological Association, pp. 211–228. DOI: 10.1037/0033-295X.94.2.211.
```

- Klein, Nadav and Ed O'Brien (Dec. 2018). "People use less information than they think to make up their minds". In: *Proceedings of the National Academy of Sciences* 115.52. Publisher: Proceedings of the National Academy of Sciences, pp. 13222–13227. DOI: 10.1073/pnas.1805327115. URL: https://www.pnas.org/doi/abs/10.1073/pnas.1805327115 (visited on 12/31/2024).
- Kloosterman, Niels A et al. (Feb. 2019). "Humans strategically shift decision bias by flexibly adjusting sensory evidence accumulation". In: *eLife* 8. Ed. by Michael J Frank. Publisher: eLife Sciences Publications, Ltd, e37321. DOI: 10.7554/eLife.37321. URL: https://doi.org/10.7554/eLife.37321 (visited on 12/19/2024).
- Ko, Yiu Hong et al. (Aug. 2022). "Divergent effects of absolute evidence magnitude on decision accuracy and confidence in perceptual judgements". In: Cognition 225, p. 105125. DOI: 10.1016/j.cognition.2022.105125. URL: https://www.sciencedirect.com/science/article/pii/S0010027722001135 (visited on 10/07/2024).
- Kohn, Linda T., Janet M. Corrigan, and Molla S. Donaldson (2000). "Errors in Health Care: A Leading Cause of Death and Injury". en. In: *To Err is Human: Building a Safer Health System*. National Academies Press (US). URL: https://www.ncbi.nlm.nih.gov/books/NBK225187/ (visited on 10/07/2024).
- Koriat, Asher, Sarah Lichtenstein, and Baruch Fischhoff (1980). "Reasons for confidence". In: *Journal of Experimental Psychology: Human Learning and Memory* 6.2. Number: 2 Place: US Publisher: American Psychological Association,

pp. 107–118. DOI: 10.1037/0278-7393.6.2.107.

- Kostopoulou, Olga, Brendan C Delaney, and Craig W Munro (Dec. 2008). "Diagnostic difficulty and error in primary care—a systematic review". In: Family Practice 25.6. Number: 6, pp. 400–413. DOI: 10.1093/fampra/cmn071. URL: https://doi.org/10.1093/fampra/cmn071 (visited on 10/07/2024).
- Kostopoulou, Olga, Jurriaan Oudhoff, et al. (Sept. 2008). "Predictors of Diagnostic Accuracy and Safe Management in Difficult Diagnostic Problems in Family Medicine". en. In: *Medical Decision Making* 28.5. Publisher: SAGE Publications Inc STM, pp. 668–680. DOI: 10.1177/0272989X08319958. URL: https://doi.org/10.1177/0272989X08319958 (visited on 12/31/2024).
- Kostopoulou, Olga, J. Edward Russo, et al. (Nov. 2012). "Information Distortion in Physicians' Diagnostic Judgments". en. In: *Medical Decision Making* 32.6. Number: 6 Publisher: SAGE Publications Inc STM, pp. 831–839. DOI: 10.1177/0272989X12447241. URL: https://doi.org/10.1177/0272989X12447241 (visited on 10/07/2024).
- Kourtidis, Ploutarchos et al. (Dec. 2022). "Influences of early diagnostic suggestions on clinical reasoning". en. In: Cognitive Research: Principles and Implications 7.1.

 Number: 1, p. 103. DOI: 10.1186/s41235-022-00453-y. URL:

 https://doi.org/10.1186/s41235-022-00453-y (visited on 10/07/2024).
- Kovacs, Roxanne J., Mylene Lagarde, and John Cairns (Jan. 2020). "Overconfident health workers provide lower quality healthcare". In: *Journal of Economic Psychology* 76, p. 102213. DOI: 10.1016/j.joep.2019.102213. URL:

```
(visited on 10/07/2024).
Kruger, Justin and David Dunning (1999). "Unskilled and unaware of it: How
   difficulties in recognizing one's own incompetence lead to inflated self-assessments".
   In: Journal of Personality and Social Psychology 77.6. Number: 6 Place: US
   Publisher: American Psychological Association, pp. 1121–1134. DOI:
   10.1037/0022-3514.77.6.1121.
Krupat, Edward et al. (2017). "Avoiding premature closure and reaching diagnostic
   accuracy: some key predictive factors". en. In: Medical Education 51.11. Number: 11
   eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/medu.13382,
   pp. 1127-1137. DOI: 10.1111/medu.13382. URL:
   https://onlinelibrary.wiley.com/doi/abs/10.1111/medu.13382 (visited on
   10/07/2024).
Kuhn, Josepha, Silvia Mamede, et al. (Mar. 2023). "Learning deliberate reflection in
   medical diagnosis: does learning-by-teaching help?" en. In: Advances in Health
   Sciences Education 28.1. Number: 1, pp. 13–26. DOI:
   10.1007/s10459-022-10138-2. URL:
   https://doi.org/10.1007/s10459-022-10138-2 (visited on 10/07/2024).
Kuhn, Josepha, Pieter van den Berg, et al. (Mar. 2022). "Improving medical residents'
   self-assessment of their diagnostic accuracy: does feedback help?" en. In: Advances
   in Health Sciences Education 27.1. Number: 1, pp. 189–200. DOI:
   10.1007/s10459-021-10080-9. URL:
   https://doi.org/10.1007/s10459-021-10080-9 (visited on 10/07/2024).
Kuipers, Benjamin and Jerome P. Kassirer (Oct. 1984). "Causal reasoning in medicine:
   Analysis of a protocol". In: Cognitive Science 8.4. Number: 4, pp. 363–385. DOI:
   10.1016/S0364-0213(84)80007-5. URL:
   https://www.sciencedirect.com/science/article/pii/S0364021384800075
   (visited on 10/07/2024).
Küper, Alisa et al. (July 2024). "Mitigating cognitive bias with clinical decision support
   systems: an experimental study". In: Journal of Decision Systems 33.3. Number: 3
   Publisher: Taylor and Francis eprint:
   https://doi.org/10.1080/12460125.2023.2245215, pp. 439–458. DOI:
   10.1080/12460125.2023.2245215. URL:
   https://doi.org/10.1080/12460125.2023.2245215 (visited on 11/29/2024).
Lambe, Kathryn Ann, David Hevey, and Brendan D. Kelly (Nov. 2018). "Guided
   Reflection Interventions Show No Effect on Diagnostic Accuracy in Medical
   Students". English. In: Frontiers in Psychology 9. Publisher: Frontiers. DOI:
   10.3389/fpsyg.2018.02297. URL: https://www.frontiersin.org/journals/
   psychology/articles/10.3389/fpsyg.2018.02297/full (visited on 10/07/2024).
Lambe, Kathryn Ann, Gary O'Reilly, et al. (Oct. 2016). "Dual-process cognitive
   interventions to enhance diagnostic reasoning: a systematic review". en. In: BMJ
   Quality & Safety 25.10. Number: 10 Publisher: BMJ Publishing Group Ltd Section:
   Systematic review, pp. 808-820. DOI: 10.1136/bmjqs-2015-004417. URL:
   https://qualitysafety.bmj.com/content/25/10/808 (visited on 11/28/2024).
Lavie, Nilli et al. (2004). "Load Theory of Selective Attention and Cognitive Control".
   In: Journal of Experimental Psychology: General 133.3. Number: 3 Place: US
   Publisher: American Psychological Association, pp. 339–354. DOI:
   10.1037/0096-3445.133.3.339.
```

https://www.sciencedirect.com/science/article/pii/S0167487019300455

```
Lawton, Rebecca et al. (May 2019). "Are more experienced clinicians better able to
   tolerate uncertainty and manage risks? A vignette study of doctors in three NHS
   emergency departments in England". en. In: BMJ Quality & Safety 28.5. Number: 5
   Publisher: BMJ Publishing Group Ltd Section: Original research, pp. 382–388. DOI:
   10.1136/bmjqs-2018-008390. URL:
   https://qualitysafety.bmj.com/content/28/5/382 (visited on 10/07/2024).
Lazard, Lisa and Jean McAvoy (Apr. 2, 2020). "Doing reflexivity in psychological
   research: What's the point? What's the practice?" In: Qualitative Research in
   Psychology 17.2. Publisher: Routledge eprint:
   https://doi.org/10.1080/14780887.2017.1400144, pp. 159–177. DOI:
   10.1080/14780887.2017.1400144. URL:
   https://doi.org/10.1080/14780887.2017.1400144.
Leblanc, Vicki R., Lee R. Brooks, and Geoffrey R. Norman (Oct. 2002). "Believing Is
   Seeing: The Influence of a Diagnostic Hypothesis on the Interpretation of Clinical
   Features". en-US. In: Academic Medicine 77.10. Number: 10, S67. URL:
   https://journals.lww.com/academicmedicine/fulltext/2002/10001/
   believing_is_seeing_the_influence_of_a_diagnostic.22.aspx (visited on
   10/07/2024).
Lee, Ciara et al. (2021). "Towards a new understanding of uncertainty in medical
   education". en. In: Journal of Evaluation in Clinical Practice 27.5. Number: 5
   _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/jep.13503, pp. 1194–1204.
   DOI: 10.1111/jep.13503. URL:
   https://onlinelibrary.wiley.com/doi/abs/10.1111/jep.13503 (visited on
   11/19/2024).
Levin, Phillip D. et al. (2012). "Antimicrobial use in the ICU: Indications and
   accuracy—an observational trial". en. In: Journal of Hospital Medicine 7.9. Number:
   9 _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1002/jhm.1964, pp. 672–678.
   DOI: 10.1002/jhm.1964. URL:
   https://onlinelibrary.wiley.com/doi/abs/10.1002/jhm.1964 (visited on
   10/07/2024).
Li, Shan, Juan Zheng, and Susanne P. Lajoie (Apr. 2023). "The relationship between
   cognitive engagement and students' performance in a simulation-based training
   environment: an information-processing perspective". In: Interactive Learning
   Environments 31.3. Number: 3 Publisher: Routledge eprint:
   https://doi.org/10.1080/10494820.2020.1848879, pp. 1532–1545. DOI:
   10.1080/10494820.2020.1848879. URL:
   https://doi.org/10.1080/10494820.2020.1848879 (visited on 10/07/2024).
Lichtenstein, Sarah, Baruch Fischhoff, and Lawrence D. Phillips (1977). "Calibration of
   Probabilities: The State of the Art". en. In: Decision Making and Change in Human
   Affairs: Proceedings of the Fifth Research Conference on Subjective Probability,
   Utility, and Decision Making, Darmstadt, 1-4 September, 1975. Ed. by
   Helmut Jungermann and Gerard De Zeeuw. Dordrecht: Springer Netherlands,
   pp. 275–324. DOI: 10.1007/978-94-010-1276-8_19. URL:
   https://doi.org/10.1007/978-94-010-1276-8 19 (visited on 11/12/2024).
Mackenzie, R. et al. (Apr. 1996). "Magnetic resonance imaging of the knee: Assessment
   of effectiveness". In: Clinical Radiology 51.4. Number: 4, pp. 245–250. DOI:
```

10.1016/S0009-9260(96)80340-0. URL:

```
https://www.sciencedirect.com/science/article/pii/S0009926096803400 (visited on 10/07/2024).
```

- Mahmoodi, Ali et al. (Mar. 2015). "Equality bias impairs collective decision-making across cultures". In: *Proceedings of the National Academy of Sciences* 112.12. Number: 12 Publisher: Proceedings of the National Academy of Sciences, pp. 3835–3840. DOI: 10.1073/pnas.1421692112. URL: https://www.pnas.org/doi/abs/10.1073/pnas.1421692112 (visited on 10/07/2024).
- Mamede, Sílvia, Tamara van Gog, et al. (Sept. 2010). "Effect of Availability Bias and Reflective Reasoning on Diagnostic Accuracy Among Internal Medicine Residents". In: *JAMA* 304.11. Number: 11, pp. 1198–1203. DOI: 10.1001/jama.2010.1276. URL: https://doi.org/10.1001/jama.2010.1276 (visited on 10/07/2024).
- Mamede, Sílvia, Adrienne Zandbergen, et al. (Sept. 2024). "Role of knowledge and reasoning processes as predictors of resident physicians' susceptibility to anchoring bias in diagnostic reasoning: a randomised controlled experiment". en. In: *BMJ Quality & Safety* 33.9. Number: 9 Publisher: BMJ Publishing Group Ltd Section: Original research, pp. 563–572. DOI: 10.1136/bmjqs-2023-016621. URL: https://qualitysafety.bmj.com/content/33/9/563 (visited on 10/07/2024).
- Mann, Doug (Apr. 1993). The Relationship between Diagnostic Accuracy and Confidence in Medical Students. en. Tech. rep. ERIC Number: ED358110. URL: https://eric.ed.gov/?id=ED358110 (visited on 10/07/2024).
- Manohar, Sanjay G. and Masud Husain (Nov. 2013). "Attention as foraging for information and value". English. In: Frontiers in Human Neuroscience 7. Publisher: Frontiers. DOI: 10.3389/fnhum.2013.00711. URL: https://www.frontiersin.org/journals/human-neuroscience/articles/10.3389/fnhum.2013.00711/full (visited on 12/31/2024).
- Mata, André, Mário B. Ferreira, and Steven J. Sherman (2013). "The metacognitive advantage of deliberative thinkers: A dual-process perspective on overconfidence". In: *Journal of Personality and Social Psychology* 105.3. Number: 3 Place: US Publisher: American Psychological Association, pp. 353–373. DOI: 10.1037/a0033640.
- McDuff, Daniel et al. (Nov. 2023). Towards Accurate Differential Diagnosis with Large Language Models. arXiv:2312.00164. DOI: 10.48550/arXiv.2312.00164. URL: http://arxiv.org/abs/2312.00164 (visited on 12/31/2024).
- McGlynn, Elizabeth A., Kathryn M. McDonald, and Christine K. Cassel (Dec. 2015). "Measurement Is Essential for Improving Diagnosis and Reducing Diagnostic Error: A Report From the Institute of Medicine". In: *JAMA* 314.23. Number: 23, pp. 2501–2502. DOI: 10.1001/jama.2015.13453. URL: https://doi.org/10.1001/jama.2015.13453 (visited on 10/07/2024).
- McMillen, Tyler and Philip Holmes (Feb. 2006). "The dynamics of choice among multiple alternatives". In: *Journal of Mathematical Psychology* 50.1, pp. 30–57. DOI: 10.1016/j.jmp.2005.10.003. URL: https://www.sciencedirect.com/science/article/pii/S0022249605000891 (visited on 12/19/2024).
- Merkle, Edgar C. (Feb. 2009). "The disutility of the hard-easy effect in choice confidence". en. In: *Psychonomic Bulletin & Review* 16.1. Number: 1, pp. 204–213. DOI: 10.3758/PBR.16.1.204. URL: https://doi.org/10.3758/PBR.16.1.204 (visited on 11/12/2024).

```
Meyer, Ashley N. D., Traber D. Giardina, et al. (Nov. 1, 2021). "Patient and clinician
   experiences of uncertainty in the diagnostic process: Current understanding and
   future directions". In: Patient Education and Counseling 104.11, pp. 2606–2615. DOI:
   10.1016/j.pec.2021.07.028. URL:
   https://www.sciencedirect.com/science/article/pii/S0738399121004870.
Meyer, Ashley N. D., Velma L. Payne, et al. (Nov. 2013). "Physicians' Diagnostic
   Accuracy, Confidence, and Resource Requests: A Vignette Study". In: JAMA
   Internal Medicine 173.21. Number: 21, pp. 1952–1958. DOI:
   10.1001/jamainternmed.2013.10081. URL:
   https://doi.org/10.1001/jamainternmed.2013.10081 (visited on 10/07/2024).
Meyer, Ashley N. D. and Hardeep Singh (June 2017). "Calibrating how doctors think
   and seek information to minimise errors in diagnosis". en. In: BMJ Quality & Safety
   26.6. Publisher: BMJ Publishing Group Ltd Section: Editorial, pp. 436–438. DOI:
   10.1136/bmjqs-2016-006071. URL:
   https://qualitysafety.bmj.com/content/26/6/436 (visited on 12/31/2024).
Moorhead, Gregory and John R. Montanari (May 1986). "An Empirical Investigation of
   the Groupthink Phenomenon". en. In: Human Relations 39.5. Number: 5 Publisher:
   SAGE Publications Ltd, pp. 399-410. DOI: 10.1177/001872678603900502. URL:
   https://doi.org/10.1177/001872678603900502 (visited on 12/10/2024).
Muhrer, Jill C. (Apr. 2014). "The importance of the history and physical in diagnosis".
   en-US. In: The Nurse Practitioner 39.4, p. 30. DOI:
   10.1097/01.NPR.0000444648.20444.e6. URL:
   https://journals.lww.com/tnpj/fulltext/2014/04000/The importance of
   the_history_and_physical_in.6.aspx/1000 (visited on 12/21/2024).
Mullen, Brian and Catherine A. Riordan (1988). "Self-Serving Attributions for
   Performance in Naturalistic Settings: A Meta-Analytic Review". en. In: Journal of
   Applied Social Psychology 18.1. Number: 1 eprint:
   https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1559-1816.1988.tb00001.x,
   pp. 3-22. DOI: 10.1111/j.1559-1816.1988.tb00001.x. URL: https:
   //onlinelibrary.wiley.com/doi/abs/10.1111/j.1559-1816.1988.tb00001.x
   (visited on 11/29/2024).
Murthy, Srinivas, Aleksandra Leligdowicz, and Neill K. J. Adhikari (Jan. 2015).
   "Intensive Care Unit Capacity in Low-Income Countries: A Systematic Review". en.
   In: PLOS ONE 10.1. Number: 1 Publisher: Public Library of Science, e0116949.
   DOI: 10.1371/journal.pone.0116949. URL: https:
   //journals.plos.org/plosone/article?id=10.1371/journal.pone.0116949
   (visited on 12/10/2024).
Navajas, Joaquin et al. (Nov. 2017). "The idiosyncratic nature of confidence". en. In:
   Nature Human Behaviour 1.11. Number: 11 Publisher: Nature Publishing Group,
   pp. 810-818. DOI: 10.1038/s41562-017-0215-1. URL:
   https://www.nature.com/articles/s41562-017-0215-1 (visited on 10/07/2024).
Nelson, Thomas O. (Jan. 1, 1990). "Metamemory: A Theoretical Framework and New
   Findings". In: ed. by Gordon H. Bower. Vol. 26. DOI:
   10.1016/S0079-7421(08)60053-5. Academic Press, pp. 125–173. DOI:
   10.1016/S0079-7421(08)60053-5. URL:
   https://www.sciencedirect.com/science/article/pii/S0079742108600535.
```

```
Nendaz, Mathieu and Arnaud Perrier (2012). "Diagnostic errors and flaws in clinical reasoning: mechanisms and prevention in practice". eng. In: Swiss Medical Weekly 142, w13706. DOI: 10.4414/smw.2012.13706.
```

- Neugebauer, M., M. Ebert, and R. Vogelmann (Mar. 2020). "A clinical decision support system improves antibiotic therapy for upper urinary tract infection in a randomized single-blinded study". en. In: *BMC Health Services Research* 20.1. Number: 1, p. 185. DOI: 10.1186/s12913-020-5045-6. URL: https://doi.org/10.1186/s12913-020-5045-6 (visited on 10/07/2024).
- Newell, Allen and Herbert A. Simon (1972). *Human problem solving*. Human problem solving. Pages: xiv, 920. Oxford, England: Prentice-Hall.
- Nickerson, Raymond S. (June 1998). "Confirmation Bias: A Ubiquitous Phenomenon in Many Guises". en. In: *Review of General Psychology* 2.2. Number: 2 Publisher: SAGE Publications Inc, pp. 175–220. DOI: 10.1037/1089-2680.2.2.175. URL: https://doi.org/10.1037/1089-2680.2.2.175 (visited on 10/07/2024).
- (1999). "How we know—and sometimes misjudge—what others know: Imputing one's own knowledge to others". In: *Psychological Bulletin* 125.6. Number: 6 Place: US Publisher: American Psychological Association, pp. 737–759. DOI: 10.1037/0033-2909.125.6.737.
- Norman, Geoffrey et al. (Feb. 2014). "The Etiology of Diagnostic Errors: A Controlled Trial of System 1 Versus System 2 Reasoning". en-US. In: Academic Medicine 89.2. Number: 2, p. 277. DOI: 10.1097/ACM.000000000000105. URL: https://journals.lww.com/academicmedicine/abstract/2014/02000/the_etiology_of_diagnostic_errors__a_controlled.26.aspx (visited on 10/07/2024).
- Oeberst, Aileen and Roland Imhoff (Nov. 2023). "Toward Parsimony in Bias Research: A Proposed Common Framework of Belief-Consistent Information Processing for a Set of Biases". en. In: *Perspectives on Psychological Science* 18.6. Number: 6 Publisher: SAGE Publications Inc, pp. 1464–1487. DOI: 10.1177/17456916221148147. URL:
 - https://doi.org/10.1177/17456916221148147 (visited on 11/05/2024).
- Olmos-Vega, Francisco M. et al. (Mar. 2023). "A practical guide to reflexivity in qualitative research: AMEE Guide No. 149". In: *Medical Teacher* 45.3. Number: 3 Publisher: Taylor and Francis _eprint:

 ${\rm https://doi.org/10.1080/0142159X.2022.2057287,\ pp.\ 241-251.\ doi:}$

10.1080/0142159X.2022.2057287. URL:

- https://doi.org/10.1080/0142159X.2022.2057287 (visited on 10/28/2024).
- Oskamp, Stuart (1965). "Overconfidence in case-study judgments". In: *Journal of Consulting Psychology* 29.3. Number: 3 Place: US Publisher: American Psychological Association, pp. 261–265. DOI: 10.1037/h0022125.
- Ostrovsky, Tehilla and Ben R. Newell (2024). "Verbal reports as data revisited: Using natural language models to validate cognitive models". In: *Decision* 11.4. Place: US Publisher: Educational Publishing Foundation, pp. 568–598. DOI: 10.1037/dec0000243.
- Page, Bethan et al. (Aug. 2024). "Strategies for adapting under pressure: an interview study in intensive care units". en. In: *BMJ Quality & Safety*. Publisher: BMJ Publishing Group Ltd Section: Original research. DOI: 10.1136/bmjqs-2024-017385. URL: https:

10/07/2024).

```
//qualitysafety.bmj.com/content/early/2024/08/23/bmjqs-2024-017385
   (visited on 12/10/2024).
Park, Won-Woo (1990). "A Review of research on Groupthink". en. In: Journal of
   Behavioral Decision Making 3.4. Number: 4 _eprint:
   https://onlinelibrary.wiley.com/doi/pdf/10.1002/bdm.3960030402, pp. 229-245.
   DOI: 10.1002/bdm.3960030402. URL:
   https://onlinelibrary.wiley.com/doi/abs/10.1002/bdm.3960030402 (visited
   on 12/10/2024).
Payne, John W (Sept. 1994). "Thinking Aloud: Insights Into Information Processing".
   en. In: Psychological Science 5.5. Number: 5 Publisher: SAGE Publications Inc,
   pp. 241-248. DOI: 10.1111/j.1467-9280.1994.tb00620.x. URL:
   https://doi.org/10.1111/j.1467-9280.1994.tb00620.x (visited on
   10/07/2024).
Pescetelli, Niccolò, Anna-Katharina Hauperich, and Nick Yeung (Oct. 2021).
   "Confidence, advice seeking and changes of mind in decision making". In: Cognition
   215, p. 104810. DOI: 10.1016/j.cognition.2021.104810. URL:
   https://www.sciencedirect.com/science/article/pii/S0010027721002298
   (visited on 10/07/2024).
Peters, Megan A. K., Thomas Thesen, et al. (July 2017). "Perceptual confidence
   neglects decision-incongruent evidence in the brain". en. In: Nature Human
   Behaviour 1.7. Number: 7 Publisher: Nature Publishing Group, pp. 1–8. DOI:
   10.1038/s41562-017-0139. URL:
   https://www.nature.com/articles/s41562-017-0139 (visited on 11/05/2024).
Peters, Micah Dj, Christina Godfrey, et al. (2024). "Scoping reviews". In: JBI Manual
   for Evidence Synthesis. Ed. by Edoardo Aromataris et al. JBI. DOI:
   10.46658/JBIMES-24-09. URL: https://jbi-global-
   wiki.refined.site/space/MANUAL/355862497/10.+Scoping+reviews (visited on
   12/02/2024).
Peterson, Michael C. et al. (Oct. 1992). "Contributions of the History, Physical
   Examination, and Laboratory Investigation in Making Medical Diagnoses:" en. In:
   Obstetrical and Gynecological Survey 47.10. Number: 10, pp. 711–712. DOI:
   10.1097/00006254-199210000-00013. URL:
   http://journals.lww.com/00006254-199210000-00013 (visited on 11/18/2024).
Pouget, Alexandre, Jan Drugowitsch, and Adam Kepecs (Mar. 2016). "Confidence and
   certainty: distinct probabilistic quantities for different goals". en. In: Nature
   Neuroscience 19.3. Number: 3 Publisher: Nature Publishing Group, pp. 366–374.
   DOI: 10.1038/nn.4240. URL: https://www.nature.com/articles/nn.4240
   (visited on 10/07/2024).
Price, Paul C. and Eric R. Stone (2004). "Intuitive evaluation of likelihood judgment
   producers: evidence for a confidence heuristic". fr. In: Journal of Behavioral
   Decision Making 17.1. Number: 1 eprint:
   https://onlinelibrary.wiley.com/doi/pdf/10.1002/bdm.460, pp. 39–57. DOI:
   10.1002/bdm.460. URL:
```

Price, Tom, Matthew Tenan, et al. (Mar. 2016). "Acute stress causes over confidence in Situation Awareness". In: 2016 IEEE International Multi-Disciplinary Conference on Cognitive Methods in Situation Awareness and Decision Support (CogSIMA).

https://onlinelibrary.wiley.com/doi/abs/10.1002/bdm.460 (visited on

```
ISSN: 2379-1675, pp. 1–6. DOI: 10.1109/COGSIMA.2016.7497778. URL: https://ieeexplore.ieee.org/abstract/document/7497778 (visited on 10/07/2024).
```

- Pronin, Emily, Daniel Y. Lin, and Lee Ross (Mar. 2002). "The Bias Blind Spot: Perceptions of Bias in Self Versus Others". en. In: Personality and Social Psychology Bulletin 28.3. Number: 3 Publisher: SAGE Publications Inc, pp. 369–381. DOI: 10.1177/0146167202286008. URL: https://doi.org/10.1177/0146167202286008 (visited on 12/04/2024).
- Putnam, Adam L., Victor W. Sungkhasettee, and Henry L. Roediger (Sept. 2016). "Optimizing Learning in College: Tips From Cognitive Psychology". en. In: Perspectives on Psychological Science 11.5. Number: 5 Publisher: SAGE Publications Inc, pp. 652–660. DOI: 10.1177/1745691616645770. URL: https://doi.org/10.1177/1745691616645770 (visited on 10/07/2024).
- Rabbitt, Patrick M. A. (May 1968). "Three Kinds of Error-Signalling Responses in a Serial Choice Task". en. In: Quarterly Journal of Experimental Psychology 20.2. Number: 2 Publisher: SAGE Publications, pp. 179–188. DOI: 10.1080/14640746808400146. URL:
 - https://doi.org/10.1080/14640746808400146 (visited on 12/18/2024).
- Rausch, Manuel et al. (Sept. 2020). "Cognitive modelling reveals distinct electrophysiological markers of decision confidence and error monitoring". In: NeuroImage 218, p. 116963. DOI: 10.1016/j.neuroimage.2020.116963. URL: https://www.sciencedirect.com/science/article/pii/S1053811920304493 (visited on 10/07/2024).
- Redelmeier, Donald A. and Eldar Shafir (Feb. 2023). "The Fallacy of a Single Diagnosis". In: *Medical Decision Making* 43.2. Number: 2 Publisher: SAGE Publications Inc STM, pp. 183–190. DOI: 10.1177/0272989X221121343. URL: https://journals.sagepub.com/doi/full/10.1177/0272989X221121343 (visited on 10/07/2024).
- Restrepo, Daniel, Katrina A. Armstrong, and Joshua P. Metlay (June 2020). "Annals Clinical Decision Making: Avoiding Cognitive Errors in Clinical Decision Making". In: *Annals of Internal Medicine* 172.11. Number: 11 Publisher: American College of Physicians, pp. 747–751. DOI: 10.7326/M19-3692. URL: https://www.acpjournals.org/doi/abs/10.7326/M19-3692 (visited on 10/07/2024).
- Robbins, Jordan M. and Joachim I. Krueger (Feb. 2005). "Social Projection to Ingroups and Outgroups: A Review and Meta-Analysis". en. In: *Personality and Social Psychology Review* 9.1. Number: 1 Publisher: SAGE Publications Inc, pp. 32–47. DOI: 10.1207/s15327957pspr0901_3. URL: https://doi.org/10.1207/s15327957pspr0901_3 (visited on 11/29/2024).
- Robinson, Lori B. and Reid Hastie (1985). "Revision of beliefs when a hypothesis is eliminated from consideration". In: *Journal of Experimental Psychology: Human Perception and Performance* 11.4. Number: 4 Place: US Publisher: American Psychological Association, pp. 443–456. DOI: 10.1037/0096-1523.11.4.443.
- Roediger Iii, Henry L., John H. Wixted, and K. Andrew Desoto (July 2012). "The Curious Complexity between Confidence and Accuracy in Reports from Memory". en. In: *Memory and Law*. Ed. by Lynn Nadel and Walter P. Sinnott-Armstrong. Oxford University Press, pp. 84–117. DOI:
 - 10.1093/acprof:oso/9780199920754.003.0004. URL:

```
10/07/2024).
Rollwage, Max et al. (May 2020). "Confidence drives a neural confirmation bias". en. In:
   Nature Communications 11.1. Number: 1 Publisher: Nature Publishing Group,
   p. 2634. DOI: 10.1038/s41467-020-16278-6. URL:
   https://www.nature.com/articles/s41467-020-16278-6 (visited on
   10/07/2024).
Rouault, Marion, Peter Dayan, and Stephen M. Fleming (Mar. 2019). "Forming global
   estimates of self-performance from local confidence". en. In: Nature Communications
   10.1. Number: 1 Publisher: Nature Publishing Group, p. 1141. DOI:
   10.1038/s41467-019-09075-3. URL:
   https://www.nature.com/articles/s41467-019-09075-3 (visited on
   11/20/2024).
Rouault, Marion, Tricia Seow, et al. (Sept. 2018). "Psychiatric Symptom Dimensions
   Are Associated With Dissociable Shifts in Metacognition but Not Task
   Performance". In: Biological Psychiatry. Translating Biology to Treatment in
   Schizophrenia 84.6. Number: 6, pp. 443–451. DOI:
   10.1016/j.biopsych.2017.12.017. URL:
   https://www.sciencedirect.com/science/article/pii/S0006322318300295
   (visited on 10/07/2024).
Royce, Celeste S., Margaret M. Hayes, and Richard M. Schwartzstein (Feb. 2019).
   "Teaching Critical Thinking: A Case for Instruction in Cognitive Biases to Reduce
   Diagnostic Errors and Improve Patient Safety". en-US. In: Academic Medicine 94.2.
   Number: 2, p. 187. doi: 10.1097/ACM.000000000002518. url:
   https://journals.lww.com/academicmedicine/fulltext/2019/02000/
   teaching critical thinking a case for instruction. 20. aspx (visited on
   11/19/2024).
Ryan, William (2021). "Diagnostic Momentum Error". en. In: Decision Making in
   Emergency Medicine: Biases, Errors and Solutions. Ed. by Manda Raz and
   Pourya Pouryahya. Singapore: Springer, pp. 117–122. DOI:
   10.1007/978-981-16-0143-9 19. URL:
   https://doi.org/10.1007/978-981-16-0143-9_19 (visited on 12/19/2024).
Sætrevik, Bjørn et al. (Jan. 2020). Anchoring, confirmation and confidence bias among
   medical decision-makers. en-us. DOI: 10.31234/osf.io/f9382. URL:
   https://osf.io/f9382 (visited on 10/07/2024).
Salas, Eduardo et al. (Mar. 1995). "Situation Awareness in Team Performance:
   Implications for Measurement and Training". en. In: Human Factors 37.1. Number:
   1 Publisher: SAGE Publications Inc, pp. 123–136. DOI:
   10.1518/001872095779049525. URL:
   https://doi.org/10.1518/001872095779049525 (visited on 12/10/2024).
Salem-Schatz, Susanne R., Jerry Avorn, and Stephen B. Soumerai (July 1990).
   "Influence of Clinical Knowledge, Organizational Context, and Practice Style on
   Transfusion Decision Making: Implications for Practice Change Strategies". In:
   JAMA 264.4. Number: 4, pp. 476-483. DOI: 10.1001/jama.1990.03450040072034.
   URL: https://doi.org/10.1001/jama.1990.03450040072034 (visited on
   10/07/2024).
Sandler, Gerald (Dec. 1980). "The importance of the history in the medical clinic and
   the cost of unnecessary tests". In: American Heart Journal 100.6, Part 1. Number: 6,
```

https://academic.oup.com/book/25835/chapter/193484433 (visited on

```
Part 1, pp. 928-931. DOI: 10.1016/0002-8703(80)90076-9. URL: https://www.sciencedirect.com/science/article/pii/0002870380900769 (visited on 11/18/2024).
```

- Sanger, Patrick C. et al. (Jan. 2017). "Diagnosing Surgical Site Infection Using Wound Photography: A Scenario-Based Study". In: *Journal of the American College of Surgeons* 224.1. Number: 1, 8–15.el. DOI: 10.1016/j.jamcollsurg.2016.10.027.
 - https://www.sciencedirect.com/science/article/pii/S1072751516315460 (visited on 10/07/2024).
- Santhosh, Lekshmi, Calvin L. Chou, and Denise M. Connor (June 2019). "Diagnostic uncertainty: from education to communication". en. In: *Diagnosis* 6.2. Publisher: De Gruyter, pp. 121–126. DOI: 10.1515/dx-2018-0088. URL: https://www.degruyter.com/document/doi/10.1515/dx-2018-0088/html (visited on 12/19/2024).
- Saposnik, Gustavo et al. (Nov. 2016). "Cognitive biases associated with medical decisions: a systematic review". en. In: BMC Medical Informatics and Decision Making 16.1. Number: 1, p. 138. DOI: 10.1186/s12911-016-0377-1. URL: https://doi.org/10.1186/s12911-016-0377-1 (visited on 10/07/2024).
- Savage, Thomas et al. (Jan. 2025). "Large language model uncertainty proxies: discrimination and calibration for medical diagnosis and treatment". In: *Journal of the American Medical Informatics Association* 32.1, pp. 139–149. DOI: 10.1093/jamia/ocae254. URL: https://doi.org/10.1093/jamia/ocae254 (visited on 12/31/2024).
- Schaefer, Peter S. et al. (Oct. 2004). "Overconfidence and the Big Five". In: Journal of Research in Personality 38.5. Number: 5, pp. 473-480. DOI: 10.1016/j.jrp.2003.09.010. URL: https://www.sciencedirect.com/science/article/pii/S0092656603001089 (visited on 10/07/2024).
- Scherer, Laura D. et al. (2015). "Trust in deliberation: The consequences of deliberative decision strategies for medical decisions". In: *Health Psychology* 34.11. Number: 11 Place: US Publisher: American Psychological Association, pp. 1090–1099. DOI: 10.1037/hea0000203.
- Schiff, Gordon D. et al. (Nov. 2009). "Diagnostic Error in Medicine: Analysis of 583 Physician-Reported Errors". In: *Archives of Internal Medicine* 169.20. Number: 20, pp. 1881–1887. DOI: 10.1001/archinternmed.2009.333. URL: https://doi.org/10.1001/archinternmed.2009.333 (visited on 10/07/2024).
- Schlögl, Mathias et al. (Feb. 2018). "A foreign older diabetic woman with an acute myocardial infarction: when cognitive biases in clinical decision-making become especially important". en. In: Case Reports 2018. Publisher: BMJ Publishing Group Section: Reminder of important clinical lesson, bcr. DOI:
 - 10.1136/bcr-2017-223135. URL:
 - https://casereports.bmj.com/content/2018/bcr-2017-223135 (visited on 10/28/2024).
- Schmidt, Eric et al. (Mar. 2013). "Simulation Exercises as a Patient Safety Strategy". In: *Annals of Internal Medicine* 158.5_Part_2. Number: 5_Part_2 Publisher: American College of Physicians, pp. 426–432. DOI: 10.7326/0003-4819-158-5-201303051-00010. URL:

```
https://www.acpjournals.org/doi/full/10.7326/0003-4819-158-5-201303051-00010 (visited on 10/07/2024).
```

- Schoenherr, Jordan Richard, Jason Waechter, and Scott J. Millington (Oct. 2018). "Subjective awareness of ultrasound expertise development: individual experience as a determinant of overconfidence". en. In: Advances in Health Sciences Education 23.4. Number: 4, pp. 749–765. DOI: 10.1007/s10459-018-9826-1. URL: https://doi.org/10.1007/s10459-018-9826-1 (visited on 10/07/2024).
- Schulz, Lion et al. (Dec. 2020). "Dogmatism manifests in lowered information search under uncertainty". In: *Proceedings of the National Academy of Sciences* 117.49. Publisher: Proceedings of the National Academy of Sciences, pp. 31527–31534. DOI: 10.1073/pnas.2009641117. URL: https://www.pnas.org/doi/abs/10.1073/pnas.2009641117 (visited on 01/10/2025).
- Schulz-Hardt, Stefan et al. (2000). "Biased information search in group decision making". In: *Journal of Personality and Social Psychology* 78.4. Number: 4 Place: US Publisher: American Psychological Association, pp. 655–669. DOI: 10.1037/0022-3514.78.4.655.
- See, Kelly E. et al. (Nov. 2011). "The detrimental effects of power on confidence, advice taking, and accuracy". In: Organizational Behavior and Human Decision Processes 116.2. Number: 2, pp. 272–285. DOI: 10.1016/j.obhdp.2011.07.006. URL: https://www.sciencedirect.com/science/article/pii/S0749597811000975 (visited on 10/07/2024).
- Shea, Nicholas et al. (Apr. 2014). "Supra-personal cognitive control and metacognition". English. In: Trends in Cognitive Sciences 18.4. Number: 4 Publisher: Elsevier, pp. 186–193. DOI: 10.1016/j.tics.2014.01.006. URL: https://www.cell.com/trends/cognitive-sciences/abstract/S1364-6613(14)00023-0 (visited on 11/05/2024).
- Shortland, Neil et al. (Nov. 2020). "Choice and consequence: A naturalistic analysis of least-worst decision-making in critical incidents". en. In: Memory & Cognition 48.8, pp. 1334–1345. DOI: 10.3758/s13421-020-01056-y. URL:
 - https://doi.org/10.3758/s13421-020-01056-y (visited on 12/19/2024).
- Sibbald, Matthew et al. (2017). "Eyeballing: the use of visual appearance to diagnose 'sick'". en. In: *Medical Education* 51.11. Number: 11 _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/medu.13396, pp. 1138–1145. DOI:
 - 10.1111/medu.13396. URL:
 - https://onlinelibrary.wiley.com/doi/abs/10.1111/medu.13396 (visited on 11/25/2024).
- Silver, Ike, Barbara A. Mellers, and Philip E. Tetlock (Sept. 2021). "Wise teamwork: Collective confidence calibration predicts the effectiveness of group discussion". In: *Journal of Experimental Social Psychology* 96, p. 104157. DOI: 10.1016/j.jesp.2021.104157. URL:
 - https://www.sciencedirect.com/science/article/pii/S0022103121000603 (visited on 10/07/2024).
- Simpkin, Arabella L. et al. (Aug. 2018). "Stress From Uncertainty and Resilience Among Depressed and Burned Out Residents: A Cross-Sectional Study". In: Academic Pediatrics 18.6, pp. 698-704. DOI: 10.1016/j.acap.2018.03.002. URL: https://www.sciencedirect.com/science/article/pii/S1876285918301220 (visited on 12/21/2024).

- Smith, Jonathan, Rom Harré, and Luk Langenhove (1995). Rethinking Methods in Psychology. DOI: 10.4135/9781446221792. 1 Oliver's Yard, 55 City Road, London EC1Y 1SP United Kingdom: SAGE Publications Ltd. DOI: 10.4135/9781446221792. URL:
 - https://sk.sagepub.com/books/rethinking-methods-in-psychology.
- Soares, William E. et al. (Jan. 2019). "Accuracy Screening for ST Elevation Myocardial Infarction in a Task-switching Simulation". In: Western Journal of Emergency Medicine 20.1. Number: 1, pp. 177–184. DOI: 10.5811/westjem.2018.10.39962. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6324702/ (visited on 10/07/2024).
- Someren, Maarten W. van, Yvonne F. Barnard, and Jacobijn Sandberg (1994). *The Think Aloud Method: A Practical Guide to Modelling Cognitive Processes.* en. Google-Books-ID: lnp9AAAAMAAJ. Academic Press.
- Staal, J., K. Katarya, et al. (Mar. 2024). "Impact of performance and information feedback on medical interns' confidence–accuracy calibration". en. In: *Advances in Health Sciences Education* 29.1. Number: 1, pp. 129–145. DOI: 10.1007/s10459-023-10252-9. URL:
 - https://doi.org/10.1007/s10459-023-10252-9 (visited on 10/07/2024).
- Staal, J., M. Speelman, et al. (Apr. 2022). "Does a suggested diagnosis in a general practitioners' referral question impact diagnostic reasoning: an experimental study". en. In: *BMC Medical Education* 22.1. Number: 1, p. 256. DOI: 10.1186/s12909-022-03325-7. URL:
 - https://doi.org/10.1186/s12909-022-03325-7 (visited on 10/07/2024).
- Stasser, Garold and William Titus (1985). "Pooling of unshared information in group decision making: Biased information sampling during discussion". In: *Journal of Personality and Social Psychology* 48.6. Number: 6 Place: US Publisher: American Psychological Association, pp. 1467–1478. DOI: 10.1037/0022-3514.48.6.1467.
- Stephens, Georgina C., Charlotte E. Rees, and Michelle D. Lazarus (Mar. 2021). "Exploring the impact of education on preclinical medical students' tolerance of uncertainty: a qualitative longitudinal study". en. In: *Advances in Health Sciences Education* 26.1. Number: 1, pp. 53–77. DOI: 10.1007/s10459-020-09971-0. URL: https://doi.org/10.1007/s10459-020-09971-0 (visited on 11/19/2024).
- Syzmanowicz, Agata and Adrian Furnham (Oct. 2011). "Gender differences in self-estimates of general, mathematical, spatial and verbal intelligence: Four meta analyses". In: *Learning and Individual Differences* 21.5. Number: 5, pp. 493–504. DOI: 10.1016/j.lindif.2011.07.001. URL:
 - https://www.sciencedirect.com/science/article/pii/S1041608011000781 (visited on 10/07/2024).
- Tabak, Nili, Yoram Bar-Tal, and Jiska Cohen-Mansfield (Oct. 1996). "Clinical Decision Making of Experienced and Novice Nurses". en. In: Western Journal of Nursing Research. Publisher: SAGE PUBLICATIONS, INC.2455 Teller Road, Thousand Oaks, CA 91320. DOI: 10.1177/019394599601800505. URL: https://journals.sagepub.com/doi/abs/10.1177/019394599601800505 (visited on 10/07/2024).
- Tajima, Satohiro et al. (Sept. 2019). "Optimal policy for multi-alternative decisions". In: Nature Neuroscience 22.9. Publisher: Nature Publishing Group, pp. 1503–1511. DOI: 10.1038/s41593-019-0453-9. URL:
 - https://www.nature.com/articles/s41593-019-0453-9.

```
Tarrant, Mark, Raff Calitri, and Dale Weston (Sept. 2012). "Social Identification Structures the Effects of Perspective Taking". en. In: Psychological Science 23.9. Number: 9 Publisher: SAGE Publications Inc, pp. 973–978. DOI: 10.1177/0956797612441221. URL: https://doi.org/10.1177/0956797612441221 (visited on 11/05/2024).
```

- Thammasitboon, Satid and William B. Cutrer (Oct. 2013). "Diagnostic Decision-Making and Strategies to Improve Diagnosis". In: Current Problems in Pediatric and Adolescent Health Care 43.9. Number: 9, pp. 232-241. DOI: 10.1016/j.cppeds.2013.07.003. URL: https://www.sciencedirect.com/science/article/pii/S1538544213000928 (visited on 11/20/2024).
- The state of medical education and practice in the UK. Workplace experiences 2024 (2024). en. Tech. rep. GMC.
- Thompson, Carl et al. (July 2004). "Nurses, information use, and clinical decision making—the real world potential for evidence-based decisions in nursing". en. In: Evidence-Based Nursing 7.3. Number: 3 Publisher: Royal College of Nursing Section: EBN notebook, pp. 68–72. DOI: 10.1136/ebn.7.3.68. URL: https://ebn.bmj.com/content/7/3/68 (visited on 10/07/2024).
- Thorlacius-Ussing, Gorm et al. (Jan. 2021). "Comparing a Single Clinician Versus a Multidisciplinary Consensus Conference Approach for Dementia Diagnostics". en. In: Journal of Alzheimer's Disease 83.2. Number: 2 Publisher: IOS Press, pp. 741–751. DOI: 10.3233/JAD-210278. URL: https://content.iospress.com/articles/journal-of-alzheimers-disease/jad210278 (visited on 10/07/2024).
- Tio, René A. et al. (Aug. 2022). "The Effect of Information Presentation Order on Residents' Diagnostic Accuracy of Online Simulated Patients With Chest Pain". In: Journal of Graduate Medical Education 14.4. Number: 4, pp. 475–481. DOI: 10.4300/JGME-D-21-01053.1. URL: https://doi.org/10.4300/JGME-D-21-01053.1 (visited on 10/07/2024).
- Tranfield, David, David Denyer, and Palminder Smart (2003). "Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review". en. In: British Journal of Management 14.3. Number: 3 _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/1467-8551.00375, pp. 207-222. DOI: 10.1111/1467-8551.00375. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/1467-8551.00375 (visited on 10/07/2024).
- Trueblood, Jennifer S. (Oct. 1, 2022). "Theories of Context Effects in Multialternative, Multiattribute Choice". In: Current Directions in Psychological Science 31.5. Publisher: SAGE Publications Inc, pp. 428–435. DOI: 10.1177/09637214221109587. URL: https://doi.org/10.1177/09637214221109587.
- Tsukamoto, Tomoko et al. (Apr. 2012). "The contribution of the medical history for the diagnosis of simulated cases by medical students". en. In: Int J Med Educ 3. Publisher: IJME, pp. 78–82. DOI: 10.5116/ijme.4f8a.e48c. URL: https://www.ijme.net/archive/3/diagnosis-by-medical-students/ (visited on 12/21/2024).
- Twycross, Alison and Allison Shorten (July 2014). "Service evaluation, audit and research: what is the difference?" en. In: *Evidence-Based Nursing* 17.3. Number: 3 Publisher: Royal College of Nursing Section: Research made simple, pp. 65–66. DOI:

- 10.1136/eb-2014-101871. URL: https://ebn.bmj.com/content/17/3/65 (visited on 12/10/2024).
- Ülkümen, Gülden, Craig R. Fox, and Bertram F. Malle (2016). "Two dimensions of subjective uncertainty: Clues from natural language". In: *Journal of Experimental Psychology: General* 145.10. Place: US Publisher: American Psychological Association, pp. 1280–1297. DOI: 10.1037/xge0000202.
- Vaccaro, Michelle, Abdullah Almaatouq, and Thomas Malone (Dec. 2024). "When combinations of humans and AI are useful: A systematic review and meta-analysis". en. In: Nature Human Behaviour 8.12. Publisher: Nature Publishing Group, pp. 2293–2303. DOI: 10.1038/s41562-024-02024-1. URL: https://www.nature.com/articles/s41562-024-02024-1 (visited on 12/31/2024).
- Vallee-Tourangeau, Frederic, David M. Beynon, and Staunton A. James (Mar. 2000). "The role of alternative hypotheses in the integration of evidence that disconfirms an acquired belief". In: European Journal of Cognitive Psychology 12.1. Number: 1 Publisher: Routledge _eprint: https://doi.org/10.1080/095414400382226, pp. 107–129. DOI: 10.1080/095414400382226. URL: https://doi.org/10.1080/095414400382226 (visited on 11/19/2024).
- Van den Berge, Kees and Sílvia Mamede (Sept. 2013). "Cognitive diagnostic error in internal medicine". In: European Journal of Internal Medicine 24.6. Number: 6, pp. 525-529. DOI: 10.1016/j.ejim.2013.03.006. URL: https://www.sciencedirect.com/science/article/pii/S0953620513000903 (visited on 10/07/2024).
- Van Wallendael, Lori Robinson and Reid Hastie (May 1990). "Tracing the footsteps of Sherlock Holmes: Cognitive representations of hypothesis testing". en. In: *Memory & Cognition* 18.3. Number: 3, pp. 240–250. DOI: 10.3758/BF03213878. URL: https://doi.org/10.3758/BF03213878 (visited on 10/07/2024).
- Vickers, Douglas and Jeanette Packer (Mar. 1982). "Effects of alternating set for speed or accuracy on response time, accuracy and confidence in a unidimensional discrimination task". In: *Acta Psychologica* 50.2. Number: 2, pp. 179–197. DOI: 10.1016/0001-6918(82)90006-3. URL: https://www.sciencedirect.com/science/article/pii/0001691882900063 (visited on 10/07/2024).
- Vindrola-Padros, Cecilia and Bruno Vindrola-Padros (Apr. 2018). "Quick and dirty? A systematic review of the use of rapid ethnographies in healthcare organisation and delivery". en. In: BMJ Quality & Safety 27.4. Number: 4, pp. 321–330. DOI: 10.1136/bmjqs-2017-007226. URL: https://qualitysafety.bmj.com/lookup/doi/10.1136/bmjqs-2017-007226 (visited on 11/29/2024).
- Voytovich, A. E., R. M. Rippey, and A. Suffredini (Apr. 1985). "Premature conclusions in diagnostic reasoning". en-US. In: *Academic Medicine* 60.4, p. 302. URL: https://journals.lww.com/academicmedicine/abstract/1985/04000/premature_conclusions_in_diagnostic_reasoning.4.aspx (visited on 01/10/2025).
- Wason, P. C. (July 1960). "On the Failure to Eliminate Hypotheses in a Conceptual Task". en. In: Quarterly Journal of Experimental Psychology 12.3. Number: 3 Publisher: SAGE Publications, pp. 129–140. DOI: 10.1080/17470216008416717. URL: https://doi.org/10.1080/17470216008416717 (visited on 10/07/2024).

- Wears, Robert L. (Dec. 2014). "Diagnosing Diagnosis". English. In: Annals of Emergency Medicine 64.6. Number: 6 Publisher: Elsevier, pp. 586-587. DOI: 10.1016/j.annemergmed.2014.08.009. URL: https://www.annemergmed.com/article/S0196-0644(14)01151-2/abstract (visited on 10/07/2024).
- (Feb. 2015). "Standardisation and its discontents". en. In: Cognition, Technology & Work 17.1. Number: 1, pp. 89–94. DOI: 10.1007/s10111-014-0299-6. URL: https://doi.org/10.1007/s10111-014-0299-6 (visited on 10/07/2024).
- Webster, Jane and Richard T. Watson (2002). "Analyzing the Past to Prepare for the Future: Writing a Literature Review". In: MIS Quarterly 26.2. Number: 2 Publisher: Management Information Systems Research Center, University of Minnesota, pp. xiii–xxiii. URL: https://www.jstor.org/stable/4132319 (visited on 10/07/2024).
- Wei, L. (2021). "Confidence and information seeking in decision making under uncertainty". English. http://purl.org/dc/dcmitype/Text. University of Oxford. URL: https://ora.ox.ac.uk/objects/uuid:39d7574e-5e7c-4346-890a-6ebb6cc9a7a2 (visited on 10/07/2024).
- Widmer, Matthew A. et al. (2018). "Complex systems thinking in emergency medicine: A novel paradigm for a rapidly changing and interconnected health care landscape". en. In: Journal of Evaluation in Clinical Practice 24.3. Number: 3 _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/jep.12862, pp. 629-634. DOI: 10.1111/jep.12862. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/jep.12862 (visited on 11/29/2024).
- Wilson, Ross McL et al. (1999). "An analysis of the causes of adverse events from the Quality in Australian Health Care Study". en. In: *Medical Journal of Australia* 170.9. Number: 9 _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.5694/j.1326-5377.1999.tb127814.x, pp. 411-415. DOI: 10.5694/j.1326-5377.1999.tb127814.x. URL: https://onlinelibrary.wiley.com/doi/abs/10.5694/j.1326-5377.1999.tb127814.x (visited on 10/07/2024).
- Wolpaw, Terry et al. (Sept. 2012). "Student Uncertainties Drive Teaching During Case Presentations: More So With SNAPPS". en-US. In: Academic Medicine 87.9, p. 1210. DOI: 10.1097/ACM.0b013e3182628fa4. URL: https://journals.lww.com/academicmedicine/abstract/2012/09000/student_uncertainties_drive_teaching_during_case.20.aspx (visited on 12/31/2024).
- Wray, Charlie M. and Lawrence K. Loo (Dec. 2015). "The Diagnosis, Prognosis, and Treatment of Medical Uncertainty". In: *Journal of Graduate Medical Education* 7.4, pp. 523–527. DOI: 10.4300/JGME-D-14-00638.1. URL: https://doi.org/10.4300/JGME-D-14-00638.1 (visited on 12/31/2024).
- Xu, Yunjie (Calvin), Bernard C.Y. Tan, and Li Yang (2006). "Who will you ask? An empirical study of interpersonal task information seeking". en. In: Journal of the American Society for Information Science and Technology 57.12. Number: 12

 _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1002/asi.20339, pp. 1666–1677.

 DOI: 10.1002/asi.20339. URL:
 - https://onlinelibrary.wiley.com/doi/abs/10.1002/asi.20339 (visited on 12/10/2024).

```
Xue, Kai, Medha Shekhar, and Dobromir Rahnev (Sept. 2023). Challenging the Bayesian confidence hypothesis. en-us. DOI: 10.31234/osf.io/mf5zp. URL: https://osf.io/mf5zp (visited on 10/07/2024).
```

- Yang, H., C. Thompson, and M. Bland (2012a). "Effect of improving the realism of simulated clinical judgement tasks on nurses' overconfidence and underconfidence: Evidence from a comparative confidence calibration analysis". In: International Journal of Nursing Studies 49.12. Accession Number: rayyan-715134733 Place: ["Centre for Reviews and Dissemination, University of York, YO10 5DD, United Kingdom", "Department of Health Sciences, University of York, YO10 5DD, United Kingdom"] Type: doi:10.1016/j.ijnurstu.2012.08.005, pp. 1505-1511. URL: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84869875001&doi=10.1016%2fj.ijnurstu.2012.08.005&partnerID=40&md5=2a223ef461e1996637b9d027c068f199.
- Yang, Huiqin and Carl Thompson (2010). "Nurses' risk assessment judgements: a confidence calibration study". en. In: Journal of Advanced Nursing 66.12. Number: 12 _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1365-2648.2010.05437.x, pp. 2751-2760. DOI: 10.1111/j.1365-2648.2010.05437.x. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2648.2010.05437.x (visited on 10/07/2024).
- Yang, Huiqin, Carl Thompson, and Martin Bland (Oct. 2012b). "The effect of clinical experience, judgment task difficulty and time pressure on nurses' confidence calibration in a high fidelity clinical simulation". en. In: BMC Medical Informatics and Decision Making 12.1. Number: 1, p. 113. DOI: 10.1186/1472-6947-12-113. URL: https://doi.org/10.1186/1472-6947-12-113 (visited on 10/07/2024).
- Yarkoni, Tal (Jan. 2022). "The generalizability crisis". en. In: Behavioral and Brain Sciences 45, el. DOI: 10.1017/S0140525X20001685. URL: https://www.cambridge.org/core/journals/behavioral-and-brain-sciences/article/generalizability-crisis/AD386115BA539A759ACB3093760F4824 (visited on 12/18/2024).
- Yates, Scott W. (Feb. 2020). "Physician Stress and Burnout". In: *The American Journal of Medicine* 133.2. Number: 2, pp. 160–164. DOI: 10.1016/j.amjmed.2019.08.034. URL: https://www.sciencedirect.com/science/article/pii/S0002934319307570 (visited on 10/07/2024).
- Zabidi-Hussin, Zabidi A. (2016). "Practical way of creating differential diagnoses through an expanded VITAMINSABCDEK mnemonic". In: Advances in Medical Education and Practice 7. Num Pages: 247-248 Place: Macclesfield, United Kingdom Publisher: Taylor and Francis Ltd. Section: Rapid Communication, pp. 247–248. DOI: 10.2147/AMEP.S106507. URL: https:
 - //www.proquest.com/docview/2223337915/abstract/5C4903DF93FA4B27PQ/1.
- Zarnoth, Paul and Janet A. Sniezek (July 1997). "The Social Influence of Confidence in Group Decision Making". In: Journal of Experimental Social Psychology 33.4.

 Number: 4, pp. 345-366. DOI: 10.1006/jesp.1997.1326. URL: https://www.sciencedirect.com/science/article/pii/S0022103197913263 (visited on 10/07/2024).
- Zhou, Tongle et al. (Mar. 2020). "Information Entropy-Based Intention Prediction of Aerial Targets under Uncertain and Incomplete Information". en. In: Entropy 22.3.

References

Number: 3 Publisher: Multidisciplinary Digital Publishing Institute, p. 279. DOI: 10.3390/e22030279. URL: https://www.mdpi.com/1099-4300/22/3/279 (visited on 12/19/2024).