

Informing Decisions Through Critical Thinking

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What is Critical Thinking?

- Careful analysis of evidence as regards its adequacy, accuracy, reliability and possible interpretations
- Willingness to ask and answer hard questions regarding evidentiary claims and the logic of arguments
- The ability to make critical distinctions
- Considering alternative explanations
- Developing and testing hypotheses to solve intellectual problems

Why is self-reflection important?

- Awareness of the limitations of various approaches to processing information
- Human beings are highly vulnerable to error
- Acceptance of uncertainty
- Willingness to listen to and engage perspectives and opinions different than one's own

Some habits and attitudes that facilitate critical thinking

- Capacity to withhold judgment until the evidence is in
- Respect for rational argument; respond to arguments, not persons
- Willingness to admit error and change one's mind in response to new information
- Persistent and determined search for knowledge

Values that support critical thinking

- Respect for truth and truth telling
- Support for learning and inquiry
- An insistence on clarity in argument and presentation
- Belief in reason
- Humility in the face of knowledge limitations
- Respect for scholarship and research

Functions of critical thinking

- To find the most plausible interpretation of evidence regarding past events, that is, “what actually happened?” or conditions, i.e., “what is actually the case?”
- To arrive at the best strategies and plans for achieving desired goals
- To learn the right lessons from past experience

Functions of critical thinking

- To bring our values, beliefs and actions into a coordinated and consistent whole
- To make tough decisions in a thoughtful and rational way
- “We must shift from being believers to being questioners” Eileen Gambrill

Three approaches to decision making

- Prefer to review all available information even if doing so requires going through multi-volume case files
- Prefer to review summaries of essential information/options; other things being equal, briefer summaries are better
- Prefer to hear or read a story with essential information; interesting story helps me understand the meaning of information

Three approaches to decision making

- What are the strong points and deficiencies of each of these approaches to decision making?

Reviewing all the information

- Retains the power to decide on the accuracy, value and weight of case information
- However, case records can be voluminous and multi-volume, requiring lots of time
- Too much information can overwhelm decision makers; i.e., more is not always better

Using concise summaries

- More efficient, especially when under time pressures
- Gives power to whomever is collecting, reviewing and organizing information
- If summaries contain errors, these errors may go unchallenged or unnoticed
- In worst case scenarios, decision makers can be manipulated by staff

Depending on stories

- Stories are emotionally compelling
- Storytellers may be more interested in the narrative power of a story than its truth
- Stories often contain implicit partially concealed biases that influence decision makers
- Emotional power of stories can impede dispassionate analysis

What is bias?

- In common usage, bias often means having a fixed opinion and being closed to new information or to rational argument.

Heuristic bias

- Referred to by some scholars as mental shortcuts that systematically incline people to make errors in judgment. Daniel Kahneman's Thinking Fast and Slow contains information about and analysis of heuristic biases.

System 1 and System 2

Kahneman describes two types of mental operations:

- System 1 is quick, intuitive, emotionally charged, energetic and effortless
- System 2 is slow, analytical, lazy and taxing (requires mental energy)

System 1 operations

- Prone to bias
- Highly intuitive
- Likes coherent stories with clear causal links; is quick to produce stories with a minimum of information
- Infers and invents causes and intentions
- Neglects ambiguity and suppresses doubt

System 1 operations

- Ignores absent evidence
- Exaggerates emotional consistency
- Substitutes easier questions for harder ones
- Poor at statistical reasoning

System 2

- Deliberated, analytical
- Limited energy stores; lazy
- Usually finds rationalizations for the intuitive conclusions of System 1
- Able to engage in statistical reasoning
- Capable of doubt
- Can entertain ambiguity; postpone judgment
- Self-deluded regarding its degree of control

System 2 operations

- May endorse bias because they seem to be repeatedly confirmed by experience
- Biased persons scan the environment for evidence that their biases are correct and ignore evidence that conflicts with their biases

Power of confirmation bias

- English scholar, Eileen Munro, has written about the power of confirmation bias in child protection:
- Once CPA caseworkers make up their minds about risk and safety issues, they mainly look for evidence that confirms their views, and disregard conflicting evidence

Intuition

- Intuition has a powerful effect on decision making due to its speed, use of narratives created with small amounts of information and because it is accompanied by a strong sense of conviction
- Inexperienced decision makers should work at checking the speed of intuitive judgments, slowing down and processing information with supervisors and peers

Spotlight Effect

- Arriving at premature conclusions based on a thin amount of information available at a point in time, i.e., *What You See Is All There Is* (WYSIATI)
- Guideline for decision making: when in possession of a small amount of information, ask yourself and others the question: “what important information do we currently lack?”

James Scenario

- James, age 5, was found by day care center staff with multiple black and blue linear marks on his lower back, buttocks and upper legs. He was clearly experiencing some discomfort in sitting with these bruises. James told his teacher that his mother's boyfriend, Rudy, spanked him for splashing water on the bathroom floor. James' mother, Denise, and Rudy picked James up at the day care center before the CPS worker arrived.
- What additional information is needed before deciding to ask police to place James out of the home?

Widen your options

- Guideline for decision making: in facing important decisions, avoid either/or choices whenever possible, i.e., **shift the spotlight.**

Combat confirmation bias

- Guideline for decision making: whenever you've reached a tentative conclusion, stay open to evidence that calls your conclusion into question.

Strategies for combatting confirmation bias

- Increase tolerance for uncertainty
- Transparent reasoning
- Use devil's advocate
- Notice factual information/evidence that does not fit current beliefs or understanding
- Listen to opposing views without interruptions or 'put downs.'

Short term emotion/fantasy

- Desire, fear, loathing, feelings of like or dislike, wish fulfillment or worst case scenario fantasies have a powerful effect on decision making.
- The halo effect, i.e., *persons I like can do no wrong; persons I dislike can have no virtues* is a persistent heuristic bias.

Controlling the power of short term emotions

- Practice making a clear distinction between what you want to happen from what you believe will happen
- Don't be pressured into making a quick decision when it's possible to delay the decision for a day or two, especially when the stakes are high
- Even when you have a strong preference, do your homework
- Consider base rates, not just gut feelings
- See real world experience, "ouch" to confirm or disconfirm first impressions

Prepare to be wrong

- Most people, including experts, tend to be over confident regarding predictions. This is as true in child welfare as in other professions.

Set a tripwire

- Identify indicators of poor risk and safety decisions, for example, a parent's withdrawal from community professionals and other signs of relapse
- Practice becoming aware of normally unconscious processes, such as breathing
- Recognize signs of stress such as irritability, loss of emotional control
- Pay attention to anomalies, events, and experiences that don't fit usual patterns in parent/child relationships, family functioning, risk and safety profiles

Four villains of decision making

- A) The spotlight effect
- B) Confirmation bias
- C) Short term emotional reactions
- D) Over confidence in predictions

These four tendencies often work in concert to produce a strong conviction that one's decisions and preferences are valid, a conviction that will often not stand up to analysis. These sources of error are associated with the speed and confidence of intuition.

Recognition Primed Decision Making

- Based on naturalistic studies of expert decision makers. Includes firefighters, nurses and chess masters operating under extreme time pressures or when faced with ambiguity or complexity.
- Makes use of pattern recognition, an immediate holistic grasp of a situation and its meaning for action.

Recognition Primed Decision Making

- Different than logic models which have decision makers carefully compare pros and cons of various options
- Makes use of intuition
- Looks for the first “good enough” solution, not the best solution

Recognizing Patterns

- In Gary Klein's *Sources of Power: How People Make Decisions*, experts view and understand events in their domain of expertise holistically by recognizing both common patterns and anomalies, i.e., elements that don't fit and violate expectations based on a large fund of practical experience

Recognizing Patterns Leads to Action

- The recognition of meaningful patterns primes decision making regarding actions needed to achieve a goal.

What's going on?

Rachel and Don have been together for two years and officially engaged for 15 months. They set the date for their wedding twice sending out invitations once. They cancelled the wedding one month before it was to occur after a big fight over Don's refusal to end a friendship with an ex-girlfriend. After their fight, Rachel moved out of Don's apartment and the two had no contact for almost a month. This couple has been back together for three months and they have never gotten along better. They are talking again about marriage but are afraid they will "jinx" their relationship by doing so.

Are their anxieties justified?

What's Anomalous?

A CPS social worker investigates a neglect referral on three children of a single mother, Vicki, made by the children's maternal grandmother. The referral alleges that the children are being fed, bathed, and supervised erratically as a result of the mother's drug use. "If it wasn't for me and my husband and the other grandparents, these kids might starve to death," according to the grandmother.

What's Anomalous? - Vicki

When the social worker visits the home, she finds the mother just getting out of bed at 12:30 pm; the 6 year old girl is carrying the baby and feeds her a bottle during the social worker's visit. The apartment is trashed and the 2 year old smells like she hasn't had a bath in days. However, the mother denies having a drug problem, "this is my nosey, judgmental mother; you just found me on a bad day."

When the social worker contacts the school, the school counselor tells her, "these kids (6 year old and 5 year old) have been missing a lot of school, but when they're here, they are clean and appropriately dressed, and they are bright, alert kids."

What should the social worker conclude?

Sue

Sue, a 26 year old single mother, has recently regained custody of her 2 year old son, Justin, after 8 months of inpatient and outpatient drug/alcohol treatment. She is now enrolled in a parenting skills program. A social worker carrying the case visits the home every other week and is impressed with Sue's honesty and desire to be a good parent. "I was a terrible mom when Justin was a baby, but I'll never neglect my son again," Sue has stated.

Sue (2)

During the first three months following reunification, Justin attends a TCD program regularly and is reported to be doing extremely well. Justin then begins to miss daycare about every other day. Sue is not at home on three successive visits; she calls the social worker with various excuses after each missed appointment and assures the social worker that everything is okay.

Should the social worker be concerned?

Sarah

Sarah's two children (ages 2 ½ and 4) have been in foster care for almost 18 months due to Sarah's poly drug abuse and related neglect. These children have done well in care, though her 4 year old is grief-stricken at the end of visits. Sarah has been in inpatient treatment on two separate occasions during the past 18 months and has also successfully completed parenting skills classes recommended by the CA social worker.

The social worker has planned to return the children on two occasions due to the mother's outstanding progress in drug treatment. However, three days before the scheduled date of reunification, Sarah failed a UA. Sarah adamantly denied using drugs prior to the UA and suggested that the social worker and the drug testing facility falsified the results. Sarah subsequently relapsed and had to re-enter drug treatment.

Sarah (2)

Sarah has now moved in with an old boyfriend, a convicted drug dealer, two weeks before the children are scheduled to be returned to her. The social worker is insisting that the boyfriend have a substance abuse assessment; the boyfriend has refused. Sarah is furious with the social worker who she accuses of “finding any reason she can for keeping my kids in foster care.” Sarah is demanding a new social worker, someone who is “on my side.”

How would you describe Sarah’s behavior?

Timmy

Timmy, age 7, was adopted at age 5 by his foster mother, a paralegal, after almost 3 years in foster care and several prior placements. Timmy was both abused and neglected by his birth mother from the time he was a baby. The adoptive mother has told the adoption caseworker that she is considering legally undoing the adoption due to Timmy's refusal to follow rules, lying and stealing, and conflicts over meals which Timmy sometimes refuses to eat.

The adoptive mother admits that she has become so frustrated with Timmy's refusal to eat certain foods that she has sent him to his room and to bed without supper on a few occasions. CPS intake receives a report from the school principal that Timmy has been asking, sometimes begging, for food and juice' but his adoptive mother has insisted that school personnel refuse to meet what she calls "Timmy's demands."

Timmy (2)

The principal said that the adoptive mother asked that the school give Timmy neither food or drink until he learns that he has to eat at mealtime. The teachers are upset with these instructions. According to the principal, Timmy has been lethargic and 'spacey' in class. The principal asked the CPS intake worker "what the school should do in this situation?" and whether the school should make a CPS report.

Is Timmy safe?