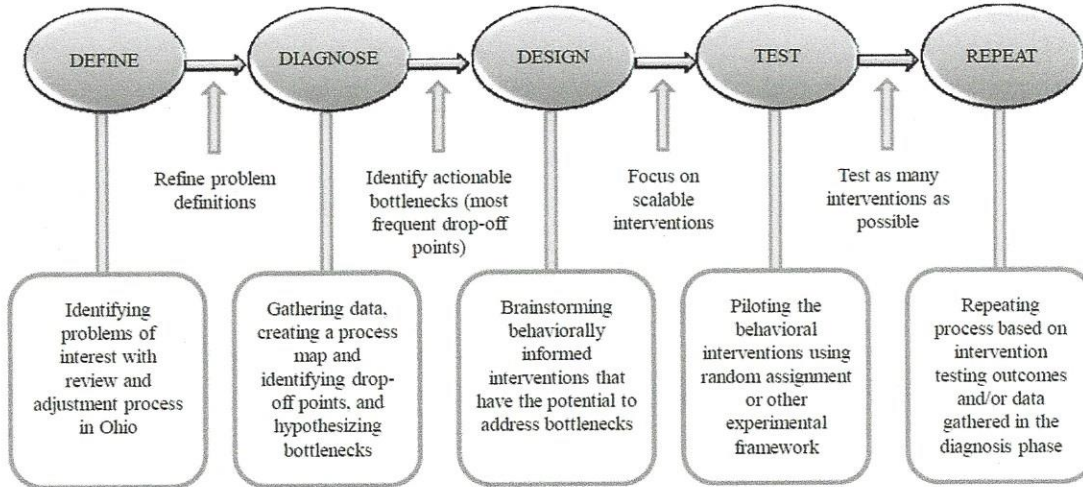


The Behavioral Diagnosis and Design Process



Source: This figure was adapted from OPRE Report No. 2014/6a April 2014 pg. ES-3 from a figure created by ideas42.

Intervention Cheat Sheet

Psychologies of Decision

Decision Phase	Bias	Definition	Intervention	Examples
Searching for options	Primacy	The first choice presented is preferred, all other things equal	Place desirable options first	Ballots—first candidate has an advantage
Searching for options	Recency bias	Use of only the very recent past to predict the future	Encourage thinking about the more distant past, reminders that things often change	
Searching for options	Mere exposure / familiarity principle	Repeated exposure to, eg objects, shapes, in neutral settings leads to viewing them more favorably	Reduce exposure to undesirable choices, increase exposure to desirable choices. (This may take time.)	Chinese/Turkish characters
Searching for options	Social norms	The behavior (or perceived behavior) of others is taken as a cue for what is appropriate	Change what norm is observed in the situation	Seeing many people coming in and out of the bank sends a strong signal
Understanding the options	Answer framing	The way choices are labeled affects how we understand them	Label to make good choices seem better and bad ones worse	Garbage vs. “landfill”
Understanding the options	Mental accounting	Assets (time, \$) are perceived as belonging to different accounts, e.g. “this is how much I can spend at restaurants this month”	Change the comparison. Which account are you appealing to?	Bonus vs. rebate
Understanding the options	Reference points	Choices are not evaluated in isolation but in comparison to a reference (either external or internal)	Change the reference point	Barbara vs. Carol: Carol is paid more but Barbara is paid better relative to her firm
Understanding the options	Units	The units that numbers are presented in matter; people don’t mentally convert units	Change the unit of comparison	Miles per gallon vs gallons per mile, hourly wages versus yearly salary

Weighing the options	Context	The other choices you are presented with can change your preferences	Change the surrounding choices, add or remove “extraneous” options	Adding another potential surgery patient increases the % of surgeons who chose a pre-existing patient
Weighing the options	Joint vs. separate evaluation	Evaluating two options next to each other leads us to consider different features than evaluating only of them one	Understand the features that are being considered in each condition (joint or separate). Depending on context, can use one or type the other, or call attention to neglected features in either case.	Shopping for cars: looking at one car, might think about style, handling, # of cupholders. Looking at two cars, may compare price, mileage.
Weighing the options	Question framing	The way a question is posed can affect the answers we provide	Change the way a question is posed	“awarding” one parent custody vs. “denying” custody to the other
Choosing an option	Status quo bias	Hard to make changes to existing state/previous choices—there is an implicit “recommendation” in the status quo	Change the status quo for clients	“Yes, I want to donate to parks”
Choosing an option	Choice overload	Too many choices (with no guidance on how to choose) can be paralyzing and lead to a bad choice or no choice	Reduce or categorize choices	Jams at the supermarket
Choosing an option	Reasons	People often pick not between choices but between <i>reasons</i> for choices	Provide additional reasons to select desired choices	“Pick A because... or pick B.”
Choosing an option	Affect	Choices are sometimes made by evaluating the emotion associated with each option	Tie choices to particular emotions	“Insurance against any cause of death” vs “insurance against terrorism”

Psychologies of Action

Action Phase	Bias	Definition	Intervention	Examples
Think about the action	Inattention: prospective memory	We set ourselves things to remember at a specified future time ("take out the trash") but do not always remember to do them	Create a routine	Floss every night
			Reminders	Glow-cap
			Remove the memory task	Automated bill payment
Think about the action	Inattention: blindness	Stimuli can go unnoticed	Purposefully direct people's attention to the stimuli that matter.	College professor with a lie in each lecture
Think about the action	Inattention: tunneling	Attention is limited so focus on one thing may prevent noticing new stimuli	Do not overload people's attention, and purposefully direct attention from the "tunnel" to new stimuli	
Want to complete the action	Time inconsistency	Preferences change. Some things are always desirable in the future, but only then. The present is valued much more highly than the near future, which itself is valued much more highly than the slightly more distant future	Choice happens now but it is for the future	Alarm clock
			Variant of above - action starts now	Automated recurring savings
Take steps towards completing the action	Procrastination and hassle factors	Knowing that you should do something and doing it are very different. Sometimes small inconveniences can lead to dramatic changes in action.	Plan-making	Flu shots with maps/times
			Change the default—what happens if you procrastinate?	
			Commitment devices	Savings accounts where you pre-commit an amount and savings duration.
			Remove hassle factor	Change process, provide assistance
Continue to see the action as worth doing	Revaluation: cognitive dissonance	Non-chosen alternatives are retrospectively devalued.	Provide/try to instill beliefs which are not dissonant to the desired actions	Salad bar experiment
Continue to see the action as worth doing	Revaluation: identity/norms	People act in different ways depending on which of their "identities" is primed	People have multiple identities. Find one favorable to the behavior. Prime that.	Soup kitchen study