



The National Financial Wellbeing
& Sustainability Initiative

THE SCIENCE OF FINANCIAL BEHAVIOUR – Part 1

Behavioural Biases as Game Ingredients



Session Outline



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Why Behaviour Matters

Financial wellbeing is not built on knowledge alone. It is shaped by pressure, perception, confidence, habits and the decision environment.

NATIONAL DATA SIGNALS

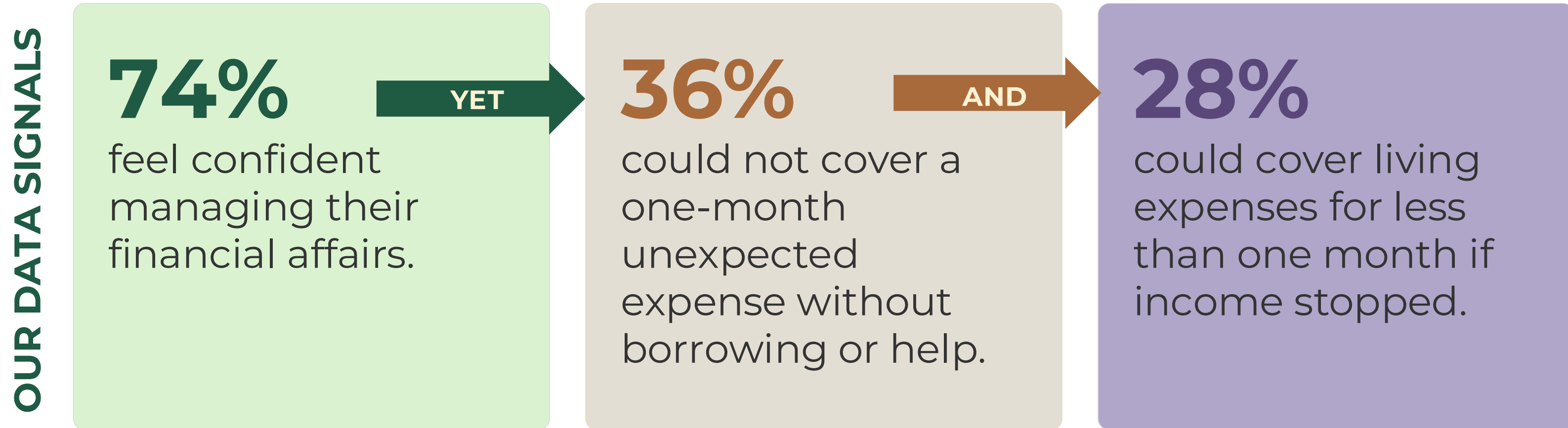
- Zoud's National behaviour study noticed that people may manage daily spending adequately but still lack shock security.
- Financial behaviour is shaped by emotional framing, social norms and perceived risk as much as knowledge.

GAME DESIGN IMPLICATION

- A game can put players inside a realistic choice environment such as limited time, social pressure, small temptations, confusing numbers and let them notice how decisions change.

The Confidence–Capacity Gap

The confidence–capability gap describes the mismatch between how capable people believe they are at managing money and how prepared or resilient their actual financial circumstances show them to be.



- Feeling capable means believing you can manage your money.
- Being prepared means having the financial buffers, plans and behaviours to cope when life changes.
- Games can make the gap between the two visible, safe and playable.

Knowing Is Not Always Doing

Financial literacy improves decisions, but many choices happen under time pressure, uncertainty, emotion and social influence. Our Zoud data shows:

GOALS

76%

have personal financial goals, but ownership does not automatically mean consistent execution.

BNPL

61%

believe BNPL can increase debt if not managed carefully; reported usage still exists and may rise in moments of cash-flow pressure.

SHORTFALLS

57%

rely on borrowing when income is insufficient, showing how credit can become the default safety net.

A Game can recreate these “knowing versus doing” moments safely, before players meet them in real life.

Shaping Financial Decisions

Every financial choice happens in a context. What we choose can be influenced by when the decision happens, how we perceive it, how we feel, what others are doing, what captures our attention and how the choice is presented.

TIME

Do I want the benefit now or later?

PERCEPTION

How risky, expensive or manageable does this feel?

EMOTION

Am I afraid of losing?
Excited? Stressed?

SOCIAL CONTEXT

What are friends, family or influencers doing?

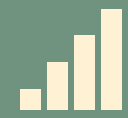
ATTENTION

What information do I actually notice?

ENVIRONMENT

What happens if I do nothing? How is the choice presented?

- Behavioural science studies these influences to understand why people may make different choices even when they have the same financial knowledge.
- As you develop a game, **ASK:** which of these forces is acting on the financial decision you want players to experience?



Behavioural Biases



Present Bias

Why “now” can feel more valuable than a better reward later.

WHAT IT IS

People often give more weight to immediate rewards and costs than to future outcomes. The future benefit may be larger, but the reward available today feels more real.

HOW IT SHOWS UP WITH MONEY

- Spending this month instead of starting an emergency fund.
- Using BNPL because today's payment feels small.
- Delaying saving because “I'll start next month.”
- Choosing a smaller reward today over a larger one later.

SCENARIO

A junior employee has AED 700 left before payday. She planned to save AED 400, but concert tickets go on sale tonight.

The future goal is unchanged, only the immediacy of the reward has changed.

POSSIBLE WAYS THIS COULD INSPIRE A GAME

- Let players experience a choice between an immediate reward and a future benefit.
- Show how a series of small “just this once” choices builds up over time.
- Use a future-self character, delayed reward or changing environment to make tomorrow visible.

Anchoring

The first number we see can influence what feels cheap, expensive or “normal.”

WHAT IT IS

People often rely too heavily on an initial number when judging value. Once a reference point is set, later numbers can feel like a bargain or a loss even when the real affordability has not been assessed.

HOW IT SHOWS UP WITH MONEY

- “Was AED 800, now AED 499.”
- A premium option makes the middle option feel affordable.
- A suggested savings amount becomes the “normal” amount.
- Monthly instalments hide the total cost of the purchase.

SCENARIO

A university student sees a laptop marked “AED 5,000 → AED 3,200.” The discount feels like a win, so he focuses on the AED 1,800 saved rather than whether AED 3,200 fits his budget.

POSSIBLE WAYS THIS COULD INSPIRE A GAME

- Give players different starting prices before they value the same item.
- Let “discounts” compete against budget limits and future needs.
- Reveal later whether the anchor changed the player’s judgement.

Framing

The same financial outcome can feel different depending on how the choice is presented.

WHAT IT IS

A decision can change when the same facts are described as a gain, a loss, a risk or a missed opportunity. The maths may be identical, but the psychological experience is different.

HOW IT SHOWS UP WITH MONEY

- “Keep AED 80” vs “lose AED 20 from AED 100.”
- A loan shown as “only AED 250/month” instead of total repayment.
- An investment described by potential upside rather than downside.
- Savings framed as “future freedom” or “money you cannot spend.”

SCENARIO

Two saving plans lead to the same final amount. One says “gain AED 1,200 by year-end.” The other says “avoid losing AED 100 every month.” A young worker reacts differently to each message.

POSSIBLE WAYS THIS COULD INSPIRE A GAME

- Keep the underlying outcome fixed but change how it is presented.
- Let players compare gain-framed and loss-framed choices.
- Use wording, visuals or characters to show how presentation affects decisions.

Loss Aversion

Losing money can feel more powerful than gaining the same amount feels rewarding.

WHAT IT IS

People often react more strongly to losses than to equivalent gains. This can make them avoid change, hold onto poor decisions, or take extra risk to recover what has already been lost.

HOW IT SHOWS UP WITH MONEY

- Holding a losing investment because selling makes the loss feel real.
- Taking risky bets to win money back.
- Refusing to switch a poor product because the change feels unsafe.
- Feeling more upset by losing AED 100 than happy about gaining AED 100.

SCENARIO

A beginner investor's AED 2,000 portfolio falls to AED 1,500.

Selling feels like admitting failure, so he refuses to review the decision, even when better options are available.

POSSIBLE WAYS THIS COULD INSPIRE A GAME

- Let players make choices after gains and after losses, then compare behaviour.
- Show how risk appetite can change after a loss.
- Create moments where walking away is emotionally difficult but financially sensible.

Mental Accounting

We put money into invisible “pots” and then treat those pots differently.

WHAT IT IS

People categorise money by source, purpose or emotion. This can help protect savings goals, but it can also lead to inconsistent decisions when all money is part of the same financial picture.

HOW IT SHOWS UP WITH MONEY

- A bonus feels like “free money.”
- Holiday money is easier to spend than salary.
- Savings stay untouched while costly debt grows.
- Labelled pots help protect emergency or education savings.

SCENARIO

A student protects AED 2,000 labelled “travel savings” but uses a credit card for daily expenses. The pot feels untouchable, even though the card debt is becoming more expensive.

POSSIBLE WAYS THIS COULD INSPIRE A GAME

- Give players several labelled wallets or savings pots.
- Create shocks that tempt players to break or protect those pots.
- Let players see when mental accounting helps discipline and when it hides trade-offs.

Social Influence

What other people do can quietly redefine what feels normal.

WHAT IT IS

People look to peers, family, influencers and communities to decide what is desirable, safe or expected. This can drive helpful behaviour, but it can also fuel lifestyle pressure or herd decisions.

HOW IT SHOWS UP WITH MONEY

- Buying something because friends have it.
- Investing because “everyone is making money.”
- Trusting family or friends more than formal advice.
- Feeling pressure to match peers’ lifestyle spending.

SCENARIO

A university group chat is full of screenshots from a trending investment app. No one has explained the risk, but the number of friends joining makes staying out feel like missing out.

POSSIBLE WAYS THIS COULD INSPIRE A GAME

- Expose players to fictional peer choices before they decide.
- Let the same money choice feel different depending on whether advice comes from a friend, parent, influencer or expert.
- Use group goals or peer norms to show both positive and negative social influence.

Overconfidence

Feeling capable does not always mean being financially prepared.

WHAT IT IS

People can overestimate their knowledge, control or ability to handle risk. In finance, this matters because confidence can grow faster than actual preparedness.

HOW IT SHOWS UP WITH MONEY

- “I know where my money goes” without tracking.
- “I will not miss payments” without a buffer.
- “I can beat the market” after one successful trade.
- Ignoring advice because the decision feels simple.

SCENARIO

A first-job employee feels confident because bills are paid on time.
But when asked how long he could manage without salary, he has never calculated his runway.

POSSIBLE WAYS THIS COULD INSPIRE A GAME

- Ask players to rate their confidence before decisions.
- Compare predicted performance with actual outcomes over several rounds.
- Offer optional advice and let players decide whether to use it.
- Show what happens when confidence grows faster than skill or resilience.

Inertia

Doing nothing can feel easier, even when doing nothing has a cost.

WHAT IT IS

People often stick with the default or delay action because change requires attention and effort. In finance, inaction can quietly become a decision.

HOW IT SHOWS UP WITH MONEY

- Never reviewing subscriptions.
- Delaying the start of a savings habit.
- Staying in an expensive product because switching takes effort.
- Ignoring a financial task until it becomes urgent.

SCENARIO

A graduate receives her first salary and plans to set up automatic savings “later.” Six months pass. Nothing blocked her from saving, but nothing made action easy either.

POSSIBLE WAYS THIS COULD INSPIRE A GAME

- Let defaults continue automatically unless the player intervenes.
- Make the accumulated cost of inaction visible over time.
- Use reminders, friction or missed opportunities as gameplay elements.

Scarcity & Attention

Financial pressure does not only reduce money, but it can also consume attention.

WHAT IT IS

When money is tight or life is stressful, urgent problems can take over attention. This can make planning, comparison and long-term thinking harder, even when people know what would help.

HOW IT SHOWS UP WITH MONEY

- Focusing on this week's bill instead of next month's repayment.
- Choosing the fastest option because mental bandwidth is low.
- Missing details because there are too many urgent demands.
- Borrowing to solve the immediate gap.

SCENARIO

A junior worker faces rent, a car repair, a phone bill and two repayment dates. The same financial problem feels very different when it arrives with stress, notifications and time pressure.

POSSIBLE WAYS THIS COULD INSPIRE A GAME

- Simulate attention scarcity, not only money scarcity.
- Give players the same choice under calm and pressured conditions.
- Use timers, competing tasks or limited information to show how pressure changes decisions.

Sunk Cost

Money already spent can keep us committed to a decision that no longer makes sense.

WHAT IT IS

People may continue a decision because they have already invested money, time or effort. The past cost cannot be recovered, but it can still shape the next choice.

HOW IT SHOWS UP WITH MONEY

- Keeping an unused gym membership because of the joining fee.
- Adding more money to a struggling project because “I already started.”
- Continuing a course, investment or purchase plan only because of past spending.
- Refusing to walk away because it feels like wasting what was already paid.

SCENARIO

A student prepaid for an expensive online course but is not using it. Instead of reassessing, she buys extra materials to “make the first payment worth it.”

POSSIBLE WAYS THIS COULD INSPIRE A GAME

- Give players a clear “walk away” option after they have invested resources.
- Let past investment appear emotionally meaningful but financially irrelevant.
- Show alternative paths that open only when players stop chasing sunk costs.

Designing for Behaviour Change

Five principles turn a financial behaviour game into something players can learn from.

LET PLAYERS FEEL THE BIAS

Do not only explain present bias; create a tempting “now” moment.

SHOW THE CONSEQUENCE

Show players how **today’s financial choices can affect what happens later.**

ALLOW SAFE FAILURE

Mistakes should teach, not punish. Give players a route back and a chance to replay.

MAKE BETTER CHOICES EASIER

Use defaults, reminders, simplification, goals or feedback carefully.

END WITH ONE TAKEAWAY

Help the player notice one thing they may do differently.

We aim for a player who leaves saying: “I noticed something about how I decide with money.”

Thank You

