



Addressing Post-Holiday Credit Card Debt in Canada

A Behavioural Economics Intervention for Timely Repayment and Financial Resilience



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Introduction

Each year, millions of Canadians enter the new year carrying a “holiday debt hangover”, credit card balances accumulated from holiday spending. In the 2023 holiday season, 59% of Canadian holiday shoppers used credit cards to finance their purchases, with many taking on debt. Alarmingly, nearly one in three Canadians who incurred holiday debt had not paid it off months later, highlighting a persistent issue with revolving balances and delayed repayment cycles (NerdWallet, 2024). This pattern suggests that despite consumers’ intentions to budget, short-term financial pressures and behavioural barriers continue to undermine timely debt clearance. Post-holiday debt undermines financial well-being through high interest rates (averaging 20% annually) and contributes to widespread financial stress (Statistics Canada, 2023).

Traditional advice to “budget better” or “spend less” often fails to prevent holiday debt because it overlooks how real people make decisions. Consumers are prone to predictable biases like present bias, which prioritizes the joy of gift-giving over future financial security, and optimism bias, which underestimates the difficulty of repaying that debt. By January, many consumers anchor on the low minimum payment displayed on their credit card statement, leading them to repay only a small portion of their total balance. This proposal applies behavioural economics to reduce post-holiday credit card debt by prompting Canadians to repay at least 50% of their December balance within the first billing cycle. The intervention delivered through digital banking channels uses commitment framing, timely reminders, and alternative payment anchors to counter present bias and minimum payment anchoring. By targeting the January repayment decision, it aligns with the ‘Managing Debt’ pillar of Canada’s National Financial Literacy Strategy. If implemented effectively, the intervention could lower interest costs, improve credit outcomes, and support long-term financial well-being.

Behavioural Diagnosis

Intended: Repay at least 50% of holiday credit card debt by March 31, in line with stated repayment intentions and post-holiday income flows.

Actual: Many users make only the minimum payment or delay repayment entirely, despite having income and intention to repay.

Behavioural Mechanisms: Biases, Frictions, and Mental Models

The dual-process framework of decision-making can often explain these repayment delays. They tend to arise from System 1 responses, which are automatic, intuitive, and emotionally driven, prioritizing financial relief. In contrast, effective repayment requires System 2 thinking, which is deliberate, reflective, and goal-oriented, supporting planned repayment in January. These cognitive patterns interact with broader contextual factors such as income volatility, seasonal expenses, and access to credit, which can either amplify or constrain repayment capacity. Understanding this interaction is essential for designing effective and equitable interventions. To shift behaviour, the intervention aims to engage System 2 planning processes that encourage deliberate, goal-oriented follow-through during the critical January repayment moment.

Present Bias; Consumers prioritize the short-term pleasure of holiday spending over long-term financial stability (Newswire, 2023). BDO's 2024 Holiday Spending Survey reinforces this, with 18% of Canadians reporting they expect to overspend during the holidays often influenced by emotional drivers such as guilt and family pressure (BDO, 2024). However, the extent and nature of present bias may vary across income levels and demographic groups, as differences in financial flexibility, cultural norms, and access to credit shape how individuals experience and respond to holiday spending pressures.

Optimism Bias & Planning Fallacy; Despite good intentions, many underestimate expenses and overestimate their repayment ability. Over one-third of Canadians (37%) planned to reduce their debt in the upcoming year by adopting better budgeting habits (BDO, 2023). Rates.ca (2019) reported that 40% had

no plan, and Neo Financial (2024) found that only 41% of Canadians set a holiday budget and 62% tracked their spending, highlighting the gap between intent and action. Optimism bias often amplifies minimum payment anchoring, users believe they'll "catch up next month," making low repayment seem reasonable.

Ostrich Effect & Pain of Paying; Facing bills triggers anxiety, leading to avoidance and token payments rather than full engagement with balances. The Bank of Canada reports that nearly half of Canadian credit card users carry balances for two or more consecutive months (Bank of Canada, 2024)., behaviour that aligns with avoidance patterns associated with the Ostrich Effect.

Minimum Payment Anchoring; The minimum payment, typically 2–5%, becomes a misleading anchor, causing underpayment and prolonged debt (Neo Financial, 2024). When paired with optimism bias, this anchor feels psychologically "safe," reinforcing inaction.

Lack of Feedback on Consequences; Without salient or timely cost feedback, consumers underestimate the compounding burden of carried balances (Bank of Canada, 2024). However, feedback design must consider users' cognitive load. Overly detailed or technical cost information can trigger anxiety or decision fatigue, reducing engagement rather than improving it. Therefore, the proposed intervention emphasizes simple, visually intuitive, and empathetic feedback cues that convey the cost of delayed repayment clearly without overwhelming users. Striking this balance between clarity and emotional accessibility is essential to sustain motivation and trust in financial tools.

Fresh Start Effect; Although 61% of Canadians set financial resolutions in January, most do not follow through without structured support or reminders (TD Bank, 2025; Dai, Milkman & Riis, 2014).

Frictions in the Context

Several frictions undermine timely repayment despite consumers' good intentions. User interfaces often highlight the minimum payment. Interest costs are rarely made salient, leaving consumers without clear feedback on the long-term implications of low payments. Emotional friction such as guilt, stress, or regret can lead to avoidance and inaction. Additionally, there are few timely prompts or planning tools to activate repayment goals when motivation is highest. These challenges are compounded by entrenched mental

models that interpret minimum payments as “safe” or “recommended,” reinforcing a cycle of underpayment.

Moment of Intervention: January Repayment Window

January is a behaviourally rich moment when financial regret and fresh-start motivation temporarily converge. Credit card statements are issued, New Year resolutions are top of mind, and emotions (guilt, anxiety, hope) are active. This window allows behavioural nudges to reach users in a state of openness, when System 2 processing can be nudged into action before inertia sets in. This intervention is tailored for users who are behaviourally, not structurally, constrained. These are consumers with the liquidity or income to repay more than the minimum, but who lack behavioural momentum. Structural barriers like job loss or insolvency are acknowledged, but are outside the reach of a digital nudge alone. Future iterations may include support pathways for structurally constrained users.

Desired Behavioural Change

This intervention targets digitally active, employed Canadian credit card users aged 25–44, a group that is both highly engaged with mobile and online financial services and more likely to carry credit card balances into the new year (Mastercard, 2023; MoneySense, 2023). While financially capable of paying down debt, this segment often fails to follow through due to cognitive biases, poor interface design, and emotional inertia. The specific behavioural objective is to encourage these users to repay at least 50% of their December holiday credit card balance by March 31. This repayment threshold is grounded in behavioural and financial rationale:

1. Mitigates financial stress by reducing the likelihood that debt will revolve beyond Q1, a known tipping point for long-term delinquency and compounding interest burdens (Bank of Canada, 2024).
2. Leverages seasonal liquidity patterns, such as early tax refunds or employer bonuses, to enable repayment without increasing perceived financial strain. While refund timing varies, aligning repayment prompts with this period can help households that receive additional funds in Q1 reduce

outstanding balances more comfortably.

3. Enhances perceived attainability by breaking a larger financial goal into a manageable near-term target, helping to bridge the gap between intention and action.

The intervention is designed for behaviourally constrained users, individuals who have the means but lack the behavioural momentum to act. For this group, simple, timely digital nudges can convert intention into action by making the desired behaviour easier, more salient, and more rewarding.

Consumer Journey & Key Bottlenecks

The visual below summarizes the seven-stage consumer journey from December to March, illustrating how emotional and cognitive patterns evolve throughout the repayment timeline. Each stage reflects a shift in behavioural barriers and decision-making friction, from present bias and optimism in December to resignation and inertia by late March.

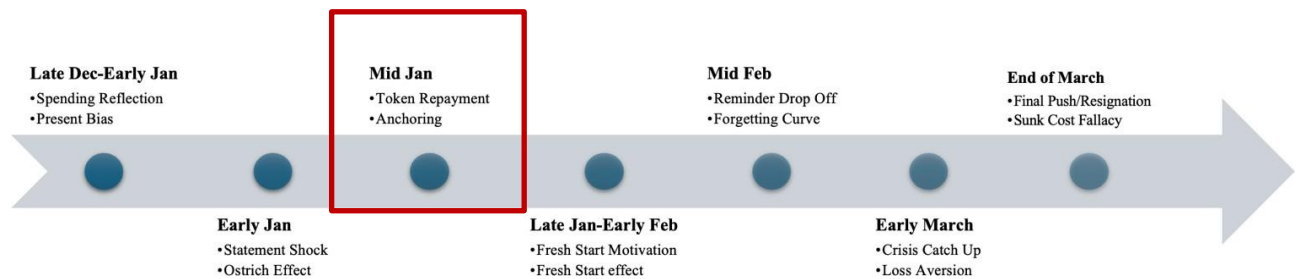


Figure 1: High-level timeline of consumer repayment journey from late December to March, marked by behavioural bottlenecks and emotional shifts. See Appendix A for detailed journey map.

This process map complements the detailed journey outlined in Appendix A and helps identify early–mid January as the optimal moment for intervention, when users receive credit card statements, experience financial regret, and are momentarily motivated by New Year resolutions. At this stage, avoidance may temporarily give way to goal-oriented behaviour, especially if nudges are well-timed to activate planning systems before inertia returns.

Behaviourally Informed Solution

This intervention integrates four digital nudges into credit card statement interfaces to address behavioural barriers identified in the consumer journey (see Appendix A). Each component applies established behavioural science principles and is deployed during the January billing cycle, when user motivation and emotional salience peak. The four nudges outlined below are designed to be modular, mutually reinforcing, and delivered at the critical decision point when users receive their January credit card statement.

Suggested Payment Default (50%)

Instead of emphasizing minimum payments, the digital statement presents a default repayment suggestion set at 50% of the user's December balance (e.g., "*Suggested Payment: \$828.25*"). This amount remains fully editable. This feature addresses minimum payment anchoring, raising the repayment reference point while preserving autonomy consistent with libertarian paternalism. To prevent potential xxx, clear opt-out options and supportive messaging will ensure users understand that this amount is flexible and can be adjusted at any time without penalty. This transparency reinforces trust and avoids perceptions of coercion. This nudge is most effective when paired with the issuance of the January statement and the motivational salience of the Fresh Start Effect, a behavioural phenomenon in which individuals are more motivated to take positive action following a meaningful time marker, such as the beginning of a new year. By aligning repayment prompts with this renewed motivation period, the intervention encourages action without pressure, helping users translate good intentions into attainable progress.

Loss-Framed Interest Savings Prompt

A real-time savings prompt, displayed beneath the suggested amount, highlights the benefits of immediate action (e.g., "*Paying this amount today will save you \$64.75 in interest.*"). This message combats present bias by making long-term costs feel immediate and concrete. It also activates loss aversion by framing the benefit as a loss averted, consistent with prospect theory.

Optional Pre-Commitment Mechanism

An optional checkbox enables users to divide the 50% repayment across three scheduled installments (e.g., January–March), which can be modified or cancelled at any time. This mitigates procrastination and

counters the planning fallacy by allowing users to act at the moment of peak motivation while reducing the future cognitive burden of re-engaging. (*Appendix C, Figure C2.*)

Progress Feedback Mechanism

A visual progress bar tracks repayment progress (e.g., “*paying this amount gets you debt free by March*”), supporting self-monitoring and reinforcing goal pursuit. This feature addresses optimism bias and leverages the goal-gradient effect, whereby motivation increases as individuals approach a target. Interaction data related to this feature appears in Appendix B.

Feasibility and Scalability

The proposed solution is low-cost, scalable, and pilot-ready. Implementation would require only front-end user interface modifications and limited backend integration for payment scheduling and interest projection. It is well-suited for A/B testing and can be deployed widely with negligible marginal cost. Defaults are adjustable, pre-commitment is voluntary, and all prompts are transparent. Together, these four behavioural design elements constitute a coherent, user-centered strategy that addresses key psychological barriers to timely credit card repayment.

Experimental Design

To evaluate the effectiveness of the proposed behavioural intervention, a randomized controlled trial (RCT) will be conducted in collaboration with two major Canadian banks. The goal is to test whether digital nudges increase the share of users repaying at least 50% of their holiday balance by March 31. Randomization will occur within each participating bank to control for any platform-level effects on communication style or interface layout.

The study will employ a between-subjects randomized controlled design with three groups:

1. **Control:** Receives a standard January credit card statement where the minimum payment (e.g., “*Minimum Payment: \$75*”) is prominently displayed.

2. **Treatment 1:** Receives a modified digital statement featuring a default repayment suggestion and a savings message. A bold box highlights: “*Suggested Payment: \$500*”, followed by a loss-framed prompt: “*Paying this amount now saves you approximately \$63 in interest.*” This aims to counteract minimum payment anchoring and present bias.
3. **Treatment 2:** Receives the same modified statement as Treatment 1, but with an additional pre-commitment mechanism. Below the suggested payment prompt, users see a checkbox labeled: “*Schedule this amount to be paid in three equal monthly payments.*” The checkbox
4. is unselected by default to preserve autonomy. Treatment 2 also includes a progress bar (e.g., “*Paying this amount gets you debt free by March*”) and a tooltip interest calculator to enhance salience and reinforce motivation.

This design targets three behavioural bottlenecks including minimum payment anchoring, present bias, and optimism bias, while also leveraging the “Fresh Start Effect” where temporal landmarks like the New Year increase goal pursuit. Although the current design does not isolate the marginal effect of loss framing, the bundled intervention reflects real-world implementations where layered nudges amplify uptake. Future iterations may explore factorial designs to decompose each component.

Participants will be selected from digitally active users aged 25–44 with a December 2025 balance $\geq$ \$1,000, reflecting the median holiday spend in Canada (Deloitte, 2023). To ensure behavioural relevance, only revolvers (individuals who have carried a balance for three or more months in 2025) will be included. The sample will exclude users in collections or hardship programs, as their financial barriers are structural rather than behavioural. Similarly, high-income users ($>$ \$100,000/year) will be excluded, since they are more likely to repay in full regardless of intervention, reducing the need for a behavioural nudge.

The intervention will be deployed via mobile and digital channels between January 5-7, 2026, with follow-up reminders sent around January 17 and 26 to align with salary deposits and billing cycles. The primary outcome will be the percentage of the January balance repaid by March 31. Secondary outcomes include time-to-first-payment, checkbox opt-in rate, average monthly payment, self-reported financial stress (April survey), and credit score changes between February and April. Behavioural salience will be assessed

using UI heatmaps and clickstream data (Appendix B) and a post-intervention manipulation check (“Do you recall seeing a suggested payment amount on your January statement?”)

The intervention’s impact will be assessed by comparing outcomes across the three experimental groups using group-level averages and user-level behavioural data. The primary outcome is the proportion of users who repay at least 50% of their January balance by March 31. Secondary outcomes include average repayment amount, time of first payment, and checkbox opt-in rate. The analysis will control for baseline repayment behaviour and balance size, which are known predictors of credit card repayment. Behavioural engagement (e.g., interaction with suggested payment box, progress bar views) will be captured using clickstream data to assess salience and nudge exposure. A manipulation check will confirm whether users noticed the suggested repayment prompt. While January is the focal point, the intervention dynamically adapts to each user's billing cycle, ensuring alignment with their personal statement date. To ensure the study is conducted responsibly, several ethical safeguards will be implemented: participants will be automatically included but can opt out at any time; the difference between minimum and recommended payment amounts will be clearly displayed; all personal information will remain anonymous.

Implementation Considerations & Limitations

This intervention does not address structural constraints such as job loss or insolvency, which may require layered support or referral pathways. Like many nudges, its impact may fade over time; rotating message framing, timing alignment (e.g., payday), and integration with broader financial wellness tools can help sustain engagement. Digital nudges inherently reach consumers who use online banking or mobile statements, but they may not be equally effective for individuals who rely on paper communication, have limited digital literacy, or face language barriers. To maintain equitable impact, similar behavioural cues could be integrated into physical statement or contact-centre interactions, ensuring inclusivity across demographics and access channels. While some banks may hesitate since nudging users to repay more quickly could reduce short-term interest revenue, it offers significant long-term benefits for banks. Faster

repayment lowers exposure to delinquency and charge-off risk, which are costly and reputationally damaging. Customers who pay down debt are also more likely to qualify for additional products, improving cross-sell opportunities and lifetime value. Strategically, offering digital tools that enhance financial health supports NPS, customer retention, and ESG positioning. A behavioural intervention that reduces financial stress and improves repayment without coercion is not just good policy, it's good business.

Conclusion

This paper identifies a persistent challenge in Canadian consumer finance: the accumulation of post-holiday credit card debt due to behavioural, not just financial, constraints. By diagnosing key bottlenecks across the January-to-March repayment window, the intervention targets the moment of greatest leverage (early January) through a set of low-cost, scalable digital nudges. These nudges including a suggested payment default, savings-framed messaging, pre-commitment tools, and progress feedback are grounded in behavioural science and deployed through existing financial infrastructure. Results from a proposed RCT will inform policy and product design. The intervention aligns strongly with FCAC's national strategy and presents a low-friction path for implementation by banks, fintechs, and policy makers. It promotes proactive repayment without coercion, using choice architecture to enable better outcomes for consumers.

Future Extensions

This intervention can be expanded in several practical ways. Pre-holiday nudges in November or December could encourage budgeting or savings before the spending period begins. Integration with installment plans or automated payment scheduling would support smoother follow-through, particularly for users who prefer structured repayment. Over time, personalization based on credit history, prior repayment behaviour, or app engagement could further tailor nudges to individual needs. Together, these extensions build toward a more comprehensive, scalable behavioural toolkit to promote financial resilience across Canada's consumer finance ecosystem.

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Appendix A: Behavioural Journey Map

Time of the Year	Late Dec – Early Jan	Early Jan	Mid Jan	Late Jan – Early Feb	Mid Feb	Early March	End of March
Stage	Spending Reflection	Statement Shock	Avoidance or Token Repayment	Fresh Start Window	Follow-up reminder opportunity	Crisis/Catch-up thinking	Final Push or Drop off
Consumer Thought Process	“I probably overspent, but it was worth it for the holidays.”	“Wow, my balance is higher than expected... but I’ll figure it out later.”	“I’ll just make the minimum payment for now and deal with it next month.”	“It’s a new year. I should get my finances in order soon.”	“Oh right, I meant to pay more. Maybe next time?”	“I should try to pay off more before the interest piles up.”	It feels late, but maybe I can still reduce the damage before the month ends
Emotions	Regret, mild denial, shame-induced avoidance	Anxiety, overwhelm, Avoidance	Guilt, temporary relief	Motivation, hope	Distraction, busy with other goals	Pressure, stress	Acceptance, potential resignation
Behavioural Biases	Present bias, hot-state decision carryover	Ostrich effect, optimism bias	Minimum payment anchoring, loss aversion avoidance	Fresh Start Effect, planning fallacy, intention–action gap	Forgetting curve, renewed present bias	Delayed loss aversion activation	Sunk cost fallacy, inertia
Friction Points	Delay in checking statements; Delay in checking statements due to lack of real-time spending visibility	Avoid opening app/email; No clear urgency cue or salient payment prompt on digital platform	Minimum payment highlighted visually; future costs invisible	No concrete plan or automatic follow-through	Lack of reminders; lost motivation	No clear feedback on progress; procrastination	Perceived as too late to act, reducing motivation but partial repayment still reduces interest
Design Implications	Use temporal landmark (Fresh Start Effect) to nudge early awareness via soft messaging	Send emotionally supportive push/email with gentle framing of repayment opportunity	Insert a digital default of 50% repayment in app, with real-time interest savings displayed (e.g., ‘Paying \$500 now saves you \$63’)	Offer pre-commitment option + payment plan framing with 3-month setup	Send dynamic reminder showing progress bar (‘You’ve repaid 35%’), and reinforce with savings to date	Show progress tracker + total interest saved so far	Send final reminder with personalized repayment impact (‘Paying \$100 more now will save you \$X’). Reinforce that even small steps matter

Appendix B: Clickstream Tables

Step	User Action	Timestamp	Notes
1	Opened credit card statement	Jan 6, 2026, 8:43 AM	Entry point
2	Hovered over “Suggested Payment: \$500” box	+3 seconds	Heatmap hotspot
3	Clicked on interest savings tooltip	+8 seconds	Engaged with salience framing
4	Scrolled past pre-commitment checkbox	+10 seconds	Did not opt in
5	Closed statement view	+15 seconds	No follow-up action

Note: All figures presented in this appendix are hypothetical and used solely for illustrative purposes.

UI Element	Interaction Type	% of Users Who Interacted	Avg. Time Spent (seconds)
Suggested Payment Box (“Pay \$500”)	Click / Hover	72%	8.4
Interest Savings Tooltip (“Save \$63...”)	Tooltip Click / Hover	65%	6.9
Progress Bar (“You’ve repaid 35%...”)	Viewed / Hover	48%	5.2
Pre-commitment Checkbox	Scroll to / Click	34%	4
Minimum Payment Text (“Pay \$75”)	Skimmed / Ignored	21%	2.1

All figures presented in this appendix are hypothetical and used solely for illustrative purposes

Appendix C : UI Mock-Ups of Experimental Conditions

The following mock-ups illustrate the user interface designs used in the experimental conditions of the proposed behavioural intervention. These screens simulate a realistic mobile banking environment and demonstrate how different behavioural elements, such as suggested payment defaults, interest savings framing, and pre-commitment options, are presented to users. The intervention aims to increase repayment of post-holiday credit card balances by making goal-consistent choices more salient, simple, and appealing. For comparison, a representative Control condition mock-up is also provided, showing a typical baseline interface used in Canadian banking platforms.

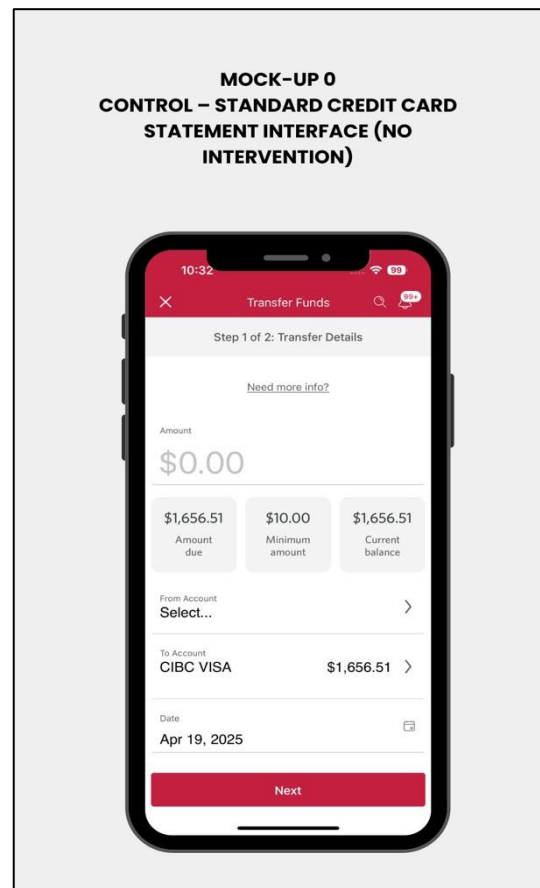


Figure C-1

**MOCK-UP 1: DIGITAL STATEMENT
INTERFACE WITH DEFAULT PAYMENT
SUGGESTION (TREATMENT 1)**

10:32

Transfer Funds

Step 1 of 2: Transfer Details

[Need more info?](#)

Amount
(Save \$64.75 in interest)
\$828.25 Suggested Payment

\$1,656.51 Amount due	\$10.00 Minimum amount (may accrue interest)	\$1,656.51 Current balance
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From Account
Select... >

To Account
CIBC VISA \$1,656.51 >

Date
Apr 19, 2025

Next

Figure C-2

**MOCK-UP 2: DIGITAL STATEMENT
INTERFACE WITH DEFAULT SUGGESTION,
SAVINGS FRAMING, AND PRE-
COMMITMENT**

10:32

Transfer Funds

Step 1 of 2: Transfer Details

[Need more info?](#)

☒ Paying this amount gets you 50% debt-free by March

Amount
(Save \$64.75 in interest)
\$828.25 Suggested Payment

☒ Auto-schedule 3 monthly payments of \$276.08

\$1,656.51 Amount due	\$10.00 Minimum amount (may accrue interest)	\$1,656.51 Current balance
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From Account
Select... >

To Account
CIBC VISA \$1,656.51 >

Date
Apr 19, 2025

Next

Figure C-3