

OSC Staff Notice 11-790

Protecting Aging Investors through Behavioural Insights

November 9, 2020

Introduction

As part of the Ontario Securities Commission's (the **OSC** or **we**) strategy and action plan to respond to the needs and priorities of Ontario seniors, described in OSC Staff Notice 11- 779 *Seniors Strategy* (the **Seniors Strategy**), we are publishing *Protecting Aging Investors through Behavioural Insights*.¹ This research report (the **Report**) complements the Canadian Securities Administrators' (the CSA) policy project to enhance the protection of older and vulnerable investors. The Report identifies behaviourally informed techniques dealers and advisers can use to encourage their older clients to provide the necessary information for enhanced investor protection measures.

Background

A key component of the OSC's Seniors Strategy is addressing issues of financial exploitation and diminished mental capacity in aging investors. To that end, the OSC, together with the CSA, recently published for comment proposed amendments (the **Proposed Amendments**) to National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations* and changes to Companion Policy 31-103CP *Registration Requirements, Exemptions and Ongoing Registrant Obligations* to enhance protection of older and vulnerable clients.²

The Proposed Amendments will require registrants to take reasonable steps to obtain the name and contact information of a trusted contact person (**TCP**). A TCP is a resource for a registrant to assist in protecting a client's financial interests or assets when responding to possible circumstances of financial exploitation or concerns about declining mental capacity. Clients may decline to provide TCP information. It is therefore important to develop methods of obtaining TCP-related information that help registrants effectively convey to their clients the importance and benefits of appointing a TCP.

Purpose

Most investors would benefit from appointing a TCP, but people do not always act in their own best-interest. Behavioural insights reveal that individual decisions are not deliberate or rational in the way

¹ OSC Staff Notice 11-779 *Seniors Strategy* (2018), 41 OSCB 2268.

² CSA Notice and Request for Comment, *Proposed Amendments to National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations and Changes to Companion Policy 31-103CP Registration Requirements, Exemptions and Ongoing Registrant Obligations to Enhance Protection of Older and Vulnerable Clients* (2020), 43 OSCB 1967.

policymakers typically assume. When faced with novel decisions, people often rely on biased decision-making processes that can lead to suboptimal outcomes.

The purpose of the research project was to understand the psychological, emotional, and social factors that may influence an older investor's decisions and identify behaviourally informed ways of increasing the likelihood they will appoint a TCP.³ The Report provides suggestions intended to assist the investment industry in obtaining trusted contact information from clients. This continues the OSC Investor Office's focus on improving the investor experience through the application of behavioural insights, promoting the use of plain language, and other initiatives.⁴

Research findings

A review of literature from behavioural science, psychology and economics revealed that there are several biases that have a greater impact on decision-making as individuals age. The key biases that can affect investors willingness to appoint a TCP are:

Optimism Bias: The tendency for people to underestimate the likelihood of negative events. This can lead investors to underweight the risks associated with cognitive decline and financial exploitation.

Avoidance of Negative Emotions: People prevent themselves from thinking about situations that create unpleasant feelings. Investors may not consider the importance of appointing a TCP because it requires them to imagine bad things happening to them.

Illusory Superiority: The tendency for people to overestimate their qualities, in relation to the same qualities of other people. This can lead investors to think that others may need TCPs but not them.

Although TCP information can be solicited in many ways, our research revealed that financial advisors' practices will most likely include presenting clients with a form. Embedding behavioural insights into the form can mitigate the impact of biases on investors' decision-making processes.

We designed three versions of a TCP form that contained elements from behavioural science and then conducted an online randomized control trial (**RCT**) to determine if these forms were more effective than a "control" form that was designed based on current practices used by firms who are already making efforts to collect this information.

Approximately 900 Canadian investors over the age of 55 were recruited online for the RCT. Each participant reviewed one of four forms and then were asked whether or not they would be willing to appoint a TCP. They were also asked several comprehension questions about the role of the TCP and the likelihood that they would experience financial exploitation.

³ This research was undertaken in collaboration with BEworks.

⁴ See OSC Staff Notice 11-778, *Behavioural Insights: Key Concepts, Applications and Regulatory Considerations* (2017), 40 O.S.C.B. 2773; OSC Staff Notice 11-787, *Improving fee disclosure through behavioural insights* (2019), 42 O.S.C.B. 6877; OSC Staff Notice 11-782, *Getting Started: Human-Centred Solutions to Engage Ontario Millennials in Investing* (2018), 41 O.S.C.B. 5567; OSC Staff Notice 11-783, *Encouraging Retirement Planning through Behavioural Insights* (2018), 41 O.S.C.B. 6148.

The version of the form that performed the best, described in detail in the Report, increased the likelihood that an older client would appoint a TCP by a remarkable 23% (compared to the control). This is a statistically significant difference (meaning that it is unlikely that the difference in score was the result of chance). Participants that viewed this form were also less likely to underestimate the possibility of experiencing negative life events than those who viewed the control.

The most effective form contained three key elements from behavioural science. Firstly, the form incorporated a de-biasing statement about the prevalence of fraud. Secondly, the form included a sentence indicating that most people support the concept of a TCP. This capitalizes on the tendency for individuals to make unfamiliar decisions based on what other people are doing. Lastly, the form required users to make an active choice to appoint or not appoint a TCP. Since it is a new policy, the historical default for investors has been not having a TCP. An active choice encourages investors to engage more directly with this novel decision.

Conclusion

This research demonstrates that there are behaviourally informed ways to significantly increase the likelihood that older investors will appoint a TCP so that dealers and advisers can help protect their financial well-being. Relatively small changes in the design of the form used to collect TCP information can have significant impacts. These findings reinforce the rationale behind the proposed policy and demonstrate that behavioural science is an important policy tool for regulators.

We encourage registrants to review the findings of the Report and consider testing the use of these approaches when designing their own policies and procedures. If proven effective, we encourage them to integrate these tactics into their current practices. More generally, we encourage dealers and advisers to test methods of presenting information to their clients in ways that make it easier for them to comprehend and act on.

We look forward to engaging with investors, registrants, and other stakeholders with respect to the Report findings and our broader work to improve the investor experience.

Questions

If you have any questions or comments about this Notice or the Report, please contact:

Tyler Fleming
Director
Investor Office
20 Queen Street West, 22nd Floor
Toronto, ON M5H 3S8
Email: tfleming@osc.gov.on.ca

Michael Tracey
Senior Advisor, Behavioural Insights
Investor Office
20 Queen Street West, 22nd Floor
Toronto, ON M5H 3S8
Email: mtracey@osc.gov.on.ca

Marian Passmore
Senior Advisor, Investor Experience
Investor Office
20 Queen Street West, 22nd Floor
Toronto, ON M5H 3S8
Email: mpassmore@osc.gov.on.ca



Protecting Aging Investors through Behavioural Insights

November 9, 2020

Prepared by

BEworks

in collaboration with



ONTARIO
SECURITIES
COMMISSION

INVESTOR OFFICE

CONTRIBUTORS



Kelly Peters
CEO & Co-Founder



Michelle Hilscher
*Director, Discovery &
Behavioural Diagnostics*



Andrew R. Abela
Associate



Matthew OBrien
Data Analyst, HR Operations



Olga Rodríguez-Sierra
Associate



Rebecca Judges
Associate

Table of Contents

04 Executive Summary

05 Approach

07 Discovery

08 Behavioural Diagnostics

10 Ideation

12 Experimentation

14 Choice Architecture

16 Appendices

Executive Summary

Demographic trends and increased average life expectancy have made older Canadians an increasingly greater proportion of the total population. While many Canadians will remain capable in their later years, the aging process may bring about changes in investor decision-making and the potential for diminished mental capacity. Unfortunately, older Canadian investors are also more likely to report losing money to frauds and scams.

To address financial exploitation and diminished mental capacity of older and vulnerable investors, the Ontario Securities Commission (OSC), together with the Canadian Securities Administrators (CSA), has proposed rules that would require registrants to take reasonable steps to obtain the name and contact information of a Trusted Contact Person (TCP) for their clients. A Trusted Contact Person is intended to be a resource for a registrant to assist in protecting a client's financial interests or assets when responding to possible circumstances of financial exploitation or concerns about declining mental capacity. Some registrants have already begun requesting their clients appoint a Trusted Contact Person as an industry best practice even in the absence of a regulatory requirement.

By not requiring clients to select a Trusted Contact Person, the proposed policy aims to provide an appropriate balance between a client's autonomy and investor protection. Since clients are not required to identify a Trusted Contact Person, the success of this proposed policy intervention will be largely dictated by the degree to which investors decide to provide one and follow through on this decision.



For most investors, appointing a Trusted Contact Person is in their best interest, but individuals do not always make strictly rational decisions. To understand the psychological, emotional, and social factors that may influence an investor's decision to appoint a Trusted Contact Person, the OSC Investor Office undertook a behavioural insights research project in collaboration with BEworks. The goal of this research was to find ways of better protecting investors by increasing the likelihood that they choose to appoint a Trusted Contact Person.

For this project, we utilized a five-phase methodology that mirrors the scientific method. We gathered insights from both the scientific literature and observations, developed empirical hypotheses, tested these hypotheses using randomized control trials, and used the experimental results to provide evidence-based recommendations.

Our research has found that there are behaviourally-informed ways to significantly increase the likelihood that older investors will appoint a Trusted Contact Person to help protect their investments. Relatively small changes in the design of the form used to collect Trusted Contact Person information can have significant impacts. As part of this project, the OSC tested different versions of the form using behavioural tools and tactics.

23%

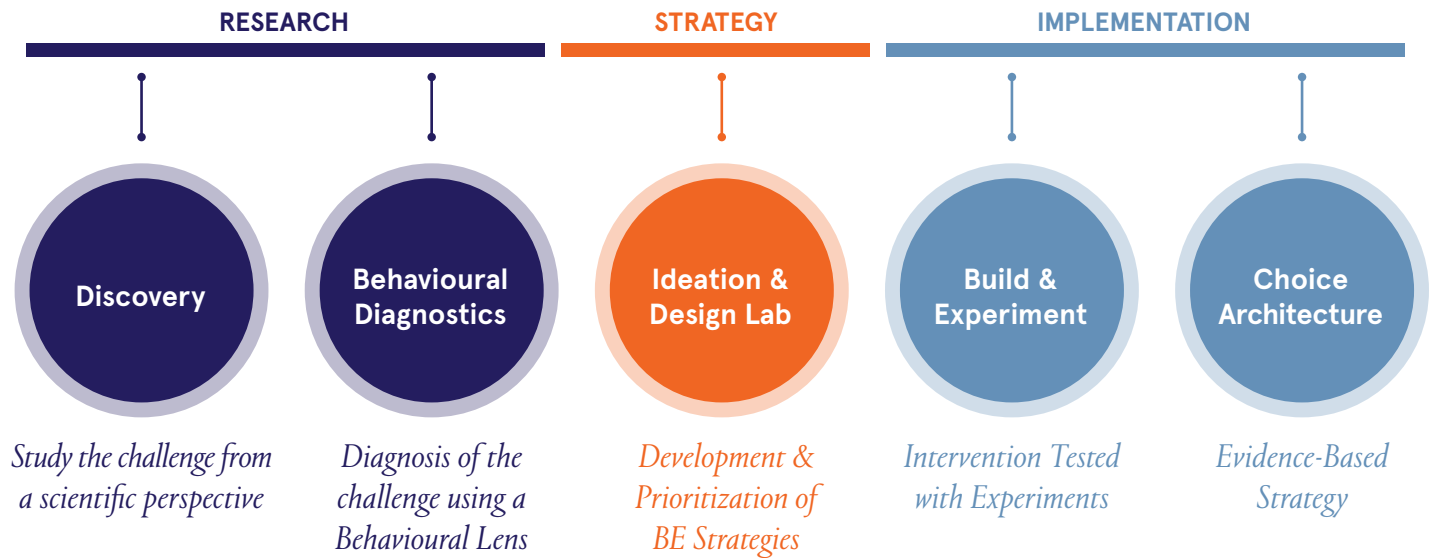
The version of the form that performed the best, described in detail in this report, increased the likelihood that an older client would appoint a Trusted Contact Person by a remarkable 23%.



If this finding occurs in the real world, nearly 1 out of every 5 investors may appoint a Trusted Contact Person because of the behavioural elements of this form.

This and other findings reinforce the rationale behind the proposed policy and demonstrate that behavioural science is an important policy tool for regulators.

Approach



Discovery

The goal of Discovery is to understand the challenge. We worked closely with the OSC to gather observations through interviews, digest existing data and in-field observations.

Based on documentation from the OSC, internal and external stakeholder interviews, and a review of the scientific literature, we defined the primary objective of this research project as follows: to increase the likelihood that an older investor is willing to appoint a Trusted Contact Person (TCP) to help protect them from financial exploitation, fraud or abuse. Our goal was to develop guidelines informed by psychology and behavioural economics to inform the best practices for asking older investors to appoint a TCP.

Behavioural Diagnostics

This phase focused on diagnosing barriers or fallacies hindering desired behaviour. We then developed behavioural journey maps as a starting point to ideate on interventions that would be most impactful.

Where TCPs are utilized, investors are asked to appoint a TCP by a financial advisor and are typically presented with a form soliciting the name and contact information of their chosen TCP. We mapped out the psychological journey experienced by an older investor when they are making this decision. We also conducted a behavioural audit of a typical version of this to identify the core barriers and biases that might reduce the likelihood that an older investor is willing to appoint a TCP. These barriers include low comprehension, optimism bias, overconfidence, and uncertainty about what other older adults similar to themselves choose to do.

Ideation

During Ideation, the research project team generated and prioritized innovative behavioural solutions that are grounded in both scientific literature and our expertise.

Based on the results of our review of the scientific literature we identified multiple behavioural interventions designed to overcome the barriers and biases we identified to increase the likelihood that an older investor would appoint a TCP. These behavioural interventions include simplification, debiasing, positive and negative priming, social norms and active choice.

Experimentation

In this phase, we designed and prototyped our prioritized solutions and launched controlled experiments to empirically validate the impact of our ideas against our behavioural objectives.

We conducted a panel experiment of 908 older Canadian investors (aged 55 and older) designed to test the effect of behavioural interventions on increasing the likelihood that an older investor would appoint a TCP. We presented participants with either a control form or one of three forms embedded with behavioural interventions. The control form was based on sample documents currently being used to collect TCP information. We recorded multiple measures including the intent to appoint a TCP, objective comprehension, and optimism bias.

Choice Architecture

In Choice Architecture, we delivered final recommendations based on the results of our testing.

We found that a form containing a debiasing statement, a statement about the social norm for appointing a TCP, and an active choice significantly increased the likelihood that an older investor would appoint a TCP by approximately 23%. This form also increased objective comprehension of the role of a TCP and reduced optimism bias. When asking older investors to appoint a TCP, we recommend:

- Simplifying the information being provided to them,
- Informing them of the likelihood that they will be a victim of financial exploitation or fraud (e.g., debiasing),
- Informing them about what other older investors typically do in this situation (e.g., social norm), and
- Presenting the option to appoint a TCP as an active choice.

Discovery

Canadians aged

65 and older

are the most likely group to report being the victim of financial fraud or abuse.^{2,3}



Many older Canadians will remain mentally capable in later years. Despite this, during the natural process of aging, some Canadians may experience changes in the brain that impact financial decision-making, which may endanger their financial security. In addition, Canadians may develop dementia or other physical illnesses that result in diminished mental capacity. As a result, older investors in Canada may be vulnerable to making financial choices that negatively impact the status of their investments or can potentially put them at increased risk of being the victim of financial exploitation. Vulnerability can affect a client of any age, take many forms, and can be temporary, sporadic or permanent in nature.

Given that older Canadians are quickly becoming a larger proportion of the total population, there is an increased need for targeted strategies to protect older investors who may become vulnerable.⁴ Part of the mandate of the Ontario Securities Commission (the OSC) is to provide protection to investors from unfair, improper or fraudulent practices. The OSC wants to ensure that the needs of older Ontarians are appropriately met by the province's securities industry. The OSC's Seniors Strategy outlines their vision of a strong and more secure future for all Ontario seniors.⁵

One of the elements of the Seniors Strategy was to develop a flexible and responsive framework to address issues of financial exploitation and diminished mental capacity among older investors. The Canadian Securities Administrators recently published for comment proposed amendments (the Proposed Amendments) to National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations* and changes to Companion Policy 31-103CP *Registration Requirements, Exemptions and Ongoing Registrant Obligations* to enhance protection of older and vulnerable clients.⁶ The Proposed Amendments will require registrants to take reasonable steps to obtain the name and contact information of a TCP, as well as the client's written consent to contact the TCP in prescribed circumstances. Registrants may contact the TCP if there are concerns about diminished mental capacity or possible financial exploitation.

The Proposed Amendments do not prevent registrants from opening and maintaining an account if a client refuses or fails to identify a TCP, as long as the registrant takes reasonable steps to obtain the information. It is therefore important to develop methods of obtaining TCP-related information that help registrants effectively convey the importance and benefits of appointing a TCP to their clients. Some jurisdictions and firms have already adopted similar policies. Based on our research, most firms that currently collect TCP information attempt to obtain the information by having advisors explain to their clients the role of the TCP and then providing them with a form to complete in which they provide contact details for their TCP and consent to the firm contacting the TCP when appropriate.

The goal of this research project was to develop guidelines informed by psychology and behavioural economics to inform the best practices for asking older investors to appoint a TCP. If successful, these guidelines should help achieve the primary objective of this project, which is to increase the likelihood that older investors are willing to appoint a TCP, to assist in protecting vulnerable and older investors from diminished mental capacity, financial fraud or financial abuse.

² Innovative Research Group (commissioned by the CSA), CSA Investor Index (2020).

³ National Initiative for the Care of the Elderly, "Into the Light: National Survey on the Mistreatment of Older Canadians", (2015).

⁴ Statistics Canada, "Canada's population estimates: age and sex", (2015).

⁵ OSC Staff Notice 11-779, Seniors Strategy (2018) 41 OSCB 2268.

⁶ CSA Notice and Request for Comment Proposed Amendments to National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations* and Changes to Companion Policy 31-103CP *Registration Requirements, Exemptions and Ongoing Registrant Obligations* to Enhance Protection of Older and Vulnerable Clients (2020) 43 OSCB 1967.

Behavioural Diagnostics

The Investor Journey and Key Decision Point

We created a map of the behavioural journey that older investors may experience when faced with the decision to appoint a TCP. We identified and plotted behavioural barriers to comprehension and exploitation/ fraud detection, leveraging findings from our literature review to support the barriers identified. These barriers may not affect all investors but there is sound scientific evidence to support the prevalence of these barriers.

When an investor meets with a financial advisor, they may be asked to appoint a TCP. At this point, the financial advisor may present the client with some information regarding the role of a TCP. This may be done verbally or be provided in an informational document. The advisor will then provide the client with a form soliciting the name and contact information of their chosen TCP. This part of the journey requires an older investor to comprehend the information they are presented with. Since the appointment of a TCP is not required, an investor must evaluate the information they are presented with and use this to decide if they would like to appoint a TCP or not. We identified this moment as a key decision point faced by an investor. Finally, after deciding that they would like to appoint a TCP, they must take action to complete this process by providing the relevant information to their advisor. We examined this journey more closely to assess the heuristics and biases that might affect an older investor's experience, and the barriers that could prevent an older investor from choosing to appoint a TCP.

Barriers to appointing a TCP

Research suggests that there are several reasons why an older investor may not appoint a TCP. Firstly, when information about the role and importance of a TCP is presented to an investor, they may not effectively process or comprehend this information. Secondly, the way in which an investor processes and considers this information may be affected by the way in which it is presented and the frame of mind that they are in when they receive it.⁷ Thirdly, an older investor may display optimism bias, causing them to underestimate the likelihood that they will experience financial exploitation or diminished mental capacity in their lifetime.⁸ Additionally, many older adults tend to be overly optimistic or overconfident about their financial decision-making abilities.⁹ Finally, humans are greatly influenced by what other people are doing and older investors do not know what attitudes other older adults have towards appointing a TCP. The selection and design of behavioural interventions to be tested in this experiment were informed by the identification of these barriers.

To examine how investors are asked to appoint a TCP, we looked to other jurisdictions and firms that currently solicit the name and contact information of their chosen TCP from investors. We examined several different forms that are currently used to collect TCP information from investors and conducted a behavioural audit of these forms. We identified a number of barriers that could reduce the likelihood that someone would choose to appoint a TCP. For example, there was a lack of clarity about the conditions under which a TCP would be contacted and the types of information that would be shared with them. Furthermore, the consequences associated with inaction were not clearly highlighted. The results of this behavioural audit were used to suggest small changes to how TCP information is presented to investors, as well as inform the design of the behavioural interventions that were experimentally tested.

⁷ Kusev, P., van Schaik, P., & Aldrovandi, S. (2012). Preferences induced by accessibility: Evidence from priming. *Journal of Neuroscience, Psychology, and Economics*, 5(4), 250–258.

⁸ Weinstein, N.D. (1980). Unrealistic optimism about future life events. *Journal of Personality and Social Psychology*, 39(5), 806-820.

⁹ Finke, M.S. et al. (2019). Old Age and the Decline of Financial Literacy. *Management Science*, 63(1), 213-230.

Relevant barriers we identified

Optimism Bias

The tendency for people to underestimate the likelihood of negative events.

"I don't anticipate anything bad happening to me in the future."

Avoidance of Negative Emotions

The tendency for people to avoid imagining unfavourable situations or emotions.

"I'd rather not imagine a situation in which I need help from others."

Positivity Bias

The tendency for people to focus on positive information over negative information.

"I tend to focus on the positive side of any situation."

Choice Supportive Bias

The tendency for people to ascribe positive attributes to a choice that was made in the past.

"The existing support mechanisms have protected me so far."

Illusory Superiority

People overestimate their qualities, in relation to the same qualities of other people.

"Others may require assistance, but I do not."

Illusion of Control

The tendency for people to overestimate their ability to control events.

"I have control over how life events will impact my ability to manage my finances."

Privacy Concerns

Concerns over sensitive information being shared with others.

"I want to prevent sensitive information from being shared with others."

Risk Perception

The perception of the likelihood of a negative outcome associated with choices or life events.

"I'm unsure of my risks of cognitive decline, injury or illness."

Overconfidence

The tendency for people to think their abilities are better than they actually are.

"I feel confident in my ability to make sound financial decisions."

Fear of Losing Independence

People greatly value their independence and seek to preserve it as they age.

"I don't want to give up control of making my own decisions."

Ideation



Our research revealed that financial advisors typically present clients with a form when asking them to appoint a TCP. Multiple behavioural interventions could be incorporated into this form to help overcome psychological barriers that may reduce the likelihood that an investor is willing to appoint a TCP. These identified interventions were chosen to overcome the following barriers and biases identified in Behavioural Diagnostics (see Behavioural Diagnostics): low comprehension of the role of a TCP, optimism bias about negative financial events, overconfidence in their decision-making abilities, and uncertainty about what other older adults choose to do.

Behavioural Interventions: Nudges and Boosts

The behavioural interventions that we prioritized can be broadly categorized as either nudges or boosts. Nudges are deliberate and predictable changes to the environment in which decisions are made, such as by modifying the cues in the social context in which someone acts to implicitly activate unconscious thought processes involved in human decision-making.¹⁰ Nudges are most effective when individuals are using automatic and instinctive forms of decision-making.¹¹ A different class of behavioural interventions are boosts, which empower individuals with the skills, knowledge and decision tools they need to make the right decision for themselves.¹² In contrast to nudges, boosts operate by engaging deliberative decision-making, which is typically slower and more effortful. This type of thinking is typically relied on when individuals are faced with decisions that require deeper analysis.

Simplifying Information

To address the barrier of low comprehension of the role of a TCP, we strived to improve the clarity of information being presented in the TCP form. Simplifying how information is presented to an individual, such as by using simplified prescription charts in hospitals, can be an effective way to reduce errors and improve decision quality.¹³ Information about the role of a TCP, the conditions under which they would be contacted, and the information that would be shared with them was designed to be as clear as possible (e.g., concisely written and presented in bullet-point form) to facilitate an investor's processing and comprehension.

Providing Information

An individual needs relevant information to make an informed decision. Making it as easy as possible for someone to obtain relevant information increases the likelihood that they will use it in their decision-making process. Minimizing the time between receiving information intended to correct a bias and when it is needed can also reduce biased thinking.¹⁴ The most effective way to do this is to provide relevant information at the exact moment someone is making a decision. Relevant information can be embedded directly into the TCP form to help investors make an informed decision and debias their evaluation of the benefits of a TCP.

Each year, Canadian firms and residents lose billions of dollars to fraud, of which financial frauds and exploitation are a subset. Data shows that older adults are more likely to be victims of these crimes.¹⁵ Providing an investor with this information (e.g., "Each year, billions of dollars are lost to fraud and scams, which are more likely to affect older adults.") is a boost that may serve to reduce optimism bias and help investors make a better decision for themselves. If this intervention is effective, an older investor may more accurately estimate the likelihood of these negative events happening to them and may be more willing to appoint a TCP.

¹⁰ K. Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press.

¹¹ Kahneman, D. (2002). Maps of bounded rationality: A perspective on intuitive judgment and choice. A Nobel prize lecture, December 8, 2002.

¹² Grüne-Yanoff, T., Hertwig, R. (2016). Nudge Versus Boost: How Coherent are Policy and Theory? *Minds & Machines*, 26, 149–183.

¹³ King D, Jabbar A, Charani E, et al Redesigning the 'choice architecture' of hospital prescription charts: a mixed methods study incorporating in situ simulation testing *BMJ Open* 2014;4:e005473.

¹⁴ Kahneman, D., Lovallo, D. Sibony, O. (2011). Before you make that big decision.... *Harvard business review*. 89, 50-60, 137.

¹⁵ Innovative Research Group (commissioned by the CSA), CSA Investor Index (2020). National Initiative for the Care of the Elderly, "Into the Light: National Survey on the Mistreatment of Older Canadians", (2015).

Priming

Another aspect of the evaluation process that can affect whether an older investor is willing to appoint a TCP is their state of mind as they are making this decision. One way in which an older investor's state of mind can be impacted is through negative priming, by asking an older investor to "reflect on a time that you made a poor financial decision." Alternatively, positive priming can be achieved by asking them to call to mind a positive memory, such as by asking them to "take a moment to reflect on a time that you made a smart financial decision." There is evidence to suggest that the accessibility of an event in memory (e.g., how easily it is to recall and imagine) can have a strong effect on our risk preferences and our decision-making.¹⁶ Thus, positive or negative priming can be used as a nudge to implicitly affect an investor's risk preferences and increase their willingness to appoint a TCP.

Social Norms

Even if older investors evaluate the information about a TCP being presented to them in a favourable manner, they may be unsure of what decision they should make when they are asked to appoint a TCP. This uncertainty may result from a lack of awareness of what other older investors typically do in this situation. According to a survey conducted by the Investment Industry Regulatory Organization of Canada (IIROC) most Canadians support the concept of appointing a TCP.¹⁷ This finding could be used to inform investors on the attitudes of others toward appointing a TCP. In an uncertain situation, providing people with information about the social norms for attitudes or behaviours can encourage people to take a specified action, such as handwashing in hospitals to reduce infection rates, or reusing towels in hotels to improve sustainability.¹⁸ An individual may be influenced to appoint a TCP when they discover that most other older investors are willing to do the same.

Active Choice

After an investor has made a decision to appoint a TCP, they must take an action to complete the process. Even if an investor decides that they want to appoint a TCP, it is possible that they procrastinate, get distracted and neglect to actually appoint someone as their TCP. Making the appointment of a TCP a requirement would alleviate this issue but it would limit individuals' freedom to choose their preferences. By presenting individuals with a mandated or active choice, individuals can be encouraged to take action while still preserving autonomy, a tactic that has been used to increase organ donation rates, as well as enrolment in retirement savings plans.¹⁹ Active choice can also trigger the experience of loss or regret aversion, by evoking the feelings of loss or regret associated with not complying with the request.²⁰ Presenting older investors with the following active choice may reduce procrastination and if effective, may increase the likelihood that an older investor appoints a TCP:

Would you like to appoint a Trusted Contact Person (TCP)?

- Yes, I would like to appoint a TCP.
- No, I would not like to appoint a TCP.

In many of the forms that we reviewed as part of our behavioural audit, a client could simply leave the TCP information sections blank without having to actively acknowledge that they did not want to appoint a TCP.

¹⁶ Kusev, P., van Schaik, P., & Aldrovandi, S. (2012). Preferences induced by accessibility: Evidence from priming. *Journal of Neuroscience, Psychology, and Economics*, 5(4), 250–258.

¹⁷ Investment Industry Regulatory Organization of Canada (IIROC), 2019, Awareness and Attitudes Related to Provisions to Protect Vulnerable Investors and Investment Firms/Advisors.

¹⁸ Singhal, A., Buscell, P., & McCandless, K. (2009). Saving lives by changing relationships: Positive deviance for MRSA prevention and control in a U.S. hospital. Positive deviance wisdom series, 3, 1–8. Goldstein, N. J., Cialdini, R. B., & Griskevicius, V. (2008). A room with a viewpoint: Using social norms to motivate environmental conservation in hotels. *Journal of consumer Research*, 35(3), 472–482.

¹⁹ Spital A. Mandated Choice: A Plan to Increase Public Commitment to Organ Donation. *JAMA*.1995;273(6):504–506. Carroll, G.D., Choi, J.J., Laibson, D., Madrian, B.C. & Metrick, A. (2009). Optimal Defaults and Active Decisions. *The Quarterly Journal of Economics*, 124(4), 1639–1674.

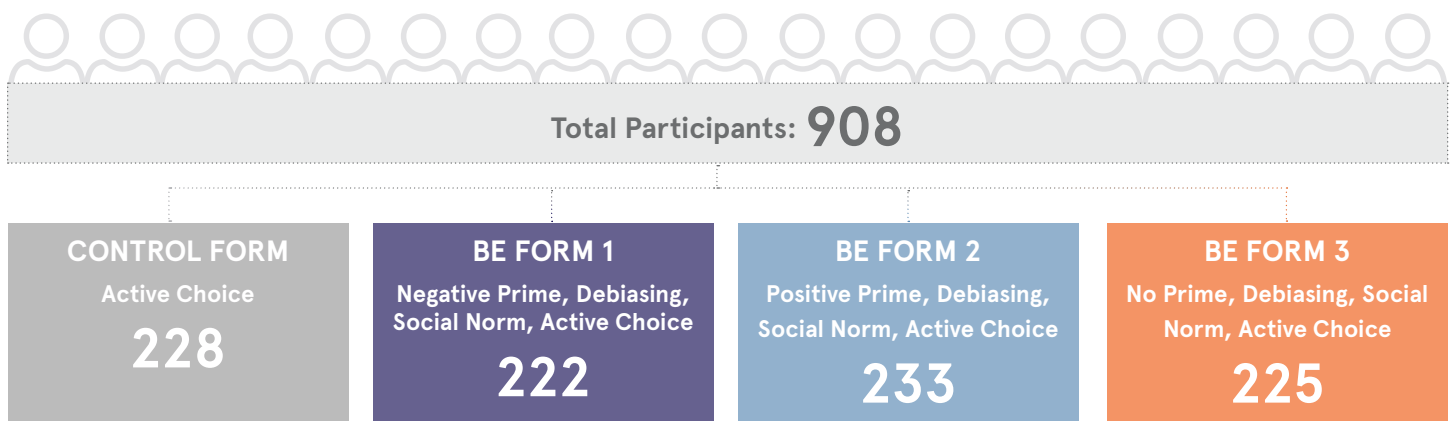
²⁰ Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler (1991). "The Endowment Effect, Loss Aversion, and Status Quo Bias," *Journal of Economic Perspectives*, 5(1), 193–206.

Experimentation

We designed an experimental model to help identify decision-making biases that were mapped to the challenges experienced by older inventors when deciding to appoint a TCP. We utilized an online quasi-randomized control trial to determine if the interventions we designed would increase the likelihood that older Canadian investors would appoint a TCP when presented with a form asking them to do so.

Randomized controlled trials (RCT) are considered the “gold standard” for behavioural science research. This methodology enables us to evaluate causal effects of the interventions that we believe will be most effective in increasing the uptake of TCPs. In an RCT, research participants are randomly assigned to different groups and then exposed to different experimental stimuli. One of these groups is a control group that receives the status quo and the other groups receive some form of “treatment”. The randomization process guarantees that the groups have similar characteristics across observable (age, gender, education) and unobservable (effort level, risk aversion) variables. The outcomes for treatment groups are compared to the control group to measure the effect of the interventions.

Participants were randomly presented with one of the four forms



Experimental Stimuli

To test the effectiveness of our interventions, a suitable control condition had to be developed. We created a control form that was based on forms currently being used to solicit TCP information from investors. We had to add some information to these forms since they would be presented to participants without a financial advisor present to provide an explanation of the TCP. We added information to these forms that described the role of a TCP and the conditions under which a TCP would be contacted.

We designed three versions of a TCP form embedded with multiple behavioural interventions (see Ideation). The “BE forms” shared the general appearance of the control version (Appendix I) and the only differences are the behavioural interventions that were added. All three BE forms (Available in Appendix II) contained the same main form which had a debiasing statement about the annual losses associated with fraud, a statement regarding the social norms for appointing a TCP, and a question asking if they would like to appoint a TCP presented as an active choice. BE Form 1 featured a negative prime, BE Form 2 contained a positive prime, and BE Form 3 did not include any priming.

After viewing the form, participants in each group were then asked a series of questions to assess their intent to appoint a TCP, their objective comprehension of the role of a TCP, and their optimism bias for negative life events.

This approach of testing multiple interventions at one time—often referred to as a “kitchen sink” approach—may produce a stronger effect on behaviour with multiple interventions working in tandem to accomplish the same behavioural change goal. Another advantage of this approach is that it is similar to what would be applied in the real world, when multiple interventions are often combined for practical reasons to maximize their combined behavioural effect. One limitation of this approach is that it can be more difficult to parse the specific mechanism underlying a particular behavioural intervention (e.g., negative priming impacts behaviour by reducing optimism bias), though in some cases this limitation can be mitigated by including different measures in your experiment.

Experimental Measures

This experiment was conducted as an online panel and not a real-world test. We explored the existing scientific literature for validated metrics that would help us predict the impact of our interventions in the real world. These metrics allowed us to measure how much the interventions affected investor decision-making. What follows is a brief description of each of these measures in relation to the aspects of decision-making that they are intended to measure, including a justification of their relationship to the behaviours of interest.

Intent

The intent to appoint a TCP was measured by presenting participants with an active choice, which requires individuals to affirmatively choose between two options. This “forced choice” paradigm provides individuals with a sense of autonomy while still forcing them to make an explicit choice. For this measure, participants were asked “Would you like to appoint a trusted contact person (TCP)?” and were required to choose one of two responses: “Yes, I would like to appoint a TCP” or “No, I would not like to appoint a TCP.”

Objective Comprehension

Six questions were used to assess an individual’s objective comprehension of the role of the TCP, including what information would be disclosed to TCPs, and in what circumstances a TCP would be contacted. This information was presented in all versions of the form that was displayed to participants in the experiment. There is a correct answer for each of these questions, and participants were allowed to choose “Yes”, “No” or “Don’t Know” for factual statements such as “The trusted contact person would make financial decisions on my behalf.” The maximum score for objective comprehension was six.

Optimism Bias

When imagining the likelihood of future events, people tend to have an overly positive view of themselves relative to other people. The effect of this “optimism bias” is that people tend to see themselves as less likely to experience negative life events and more likely to experience positive life events even relative to other people similar to themselves. On a scale of 0% (will never happen) to 100% (will definitely happen), participants were asked to rate the likelihood that three negative life events (e.g., getting financially exploited) would happen to them. Participants were then asked to rate the likelihood that these same events would happen to someone similar to them in age and sex. The optimism bias score was computed by taking the difference in these two likelihood scores (self – other) for each of the negative life events and averaged across all three.

PARTICIPANT CHARACTERISTICS

Participants were excluded from the study if

- they were under 55 years of age
- did not live in Canada and/or
- did not currently have any investments.

The online sample consisted of **908** ^{EN} English-speaking older adults residing in Canada (aged 55 and older).



The majority were located in Ontario, British Columbia and Quebec.



All participants reported having investment experience.



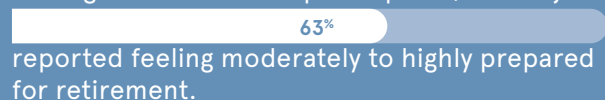
The mean age of participants was **66 years old**.

Across the entire sample,



51% indicated retirement status at the time of the study.

Among the non-retired participants, the majority



63% reported feeling moderately to highly prepared for retirement.



Most participants reported **medium to high income** (e.g., \$50,000 and higher).

²¹ Weinstein, N.D. (1980). Unrealistic optimism about future life events. *Journal of Personality and Social Psychology*, 39(5), 806-820.

²² This measure was adapted from Gouveia, S. O., & Clarke, V. (2001). Optimistic bias for negative and positive events. *Health Education*, 101(5), 228-234.

Choice Architecture

Experimental Results

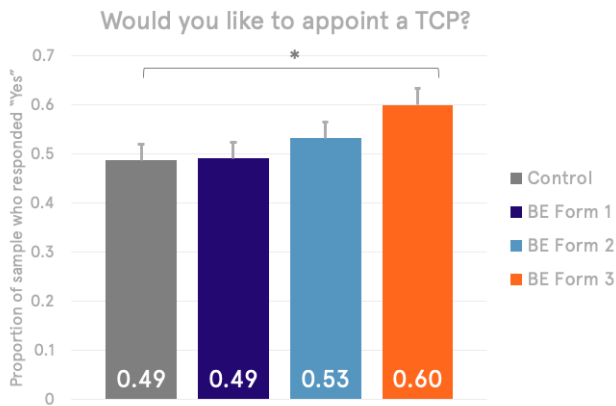


Figure 1.
Proportion of sample who responded "Yes, I would like to appoint a TCP."

Immediately after viewing the TCP form (control form, BE form 1, BE form 2 or BE form 3), participants were asked if they would like to appoint a TCP (Yes or No). In the control condition, 48.68% of participants that were shown the control form indicated "Yes, I would like to appoint a TCP" (see Figure 1). In contrast, 60% of participants that were shown BE form 3—which contained a debiasing statement, social norm statement, and an active choice—indicated that they would like to appoint a TCP. Among all three of the BE forms tested, only the BE form 3 significantly increased the likelihood that an older investor would appoint a TCP relative to the control form. Among participants shown BE form 1 and 2 (which contained negative and positive priming statements, respectively), 49.1% and 53.22% indicated that they would like to appoint a TCP which did not significantly differ from participants shown the control form. Based on these results, BE form 3—the simplest version of the BE forms embedded with behavioural interventions—produced the strongest effect on an individual's willingness to appoint a TCP. This also indicates that the priming had no effect on investor decision-making.

Comprehension

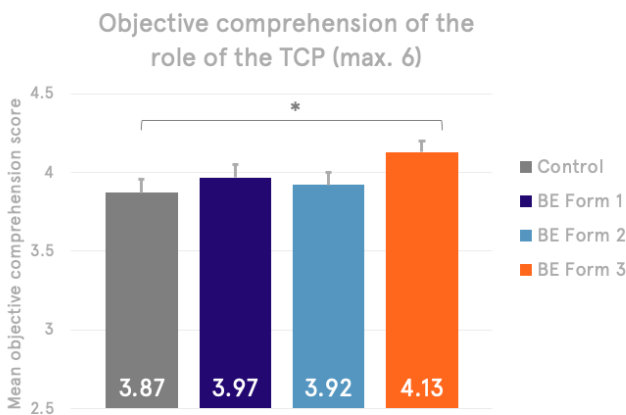


Figure 2.
Mean objective comprehension of the role of the TCP (maximum score of 6).

Participants were asked six questions to assess their objective comprehension of the role of a TCP. Participants shown the control form displayed a mean score of 3.86 out of a maximum score of six (see Figure 2). Participants shown BE form 3 displayed a mean score of 4.13, scoring statistically significantly higher than participants shown the control form. Participants shown BE form 1 and 2 displayed mean scores of 3.97 and 3.92 which did not significantly differ from control participants. Irrespective of which form they were presented with, all participants who indicated that they would like to appoint a TCP displayed significantly higher objective comprehension scores (mean score 4.27) relative to participants that declined (mean score 3.64). These results suggest that objective comprehension of the role of a TCP is associated with an individual's willingness to appoint a TCP. Furthermore, BE form 3 increased participants' objective comprehension, a stronger effect than any of the other BE forms tested.

Reducing Optimism Bias

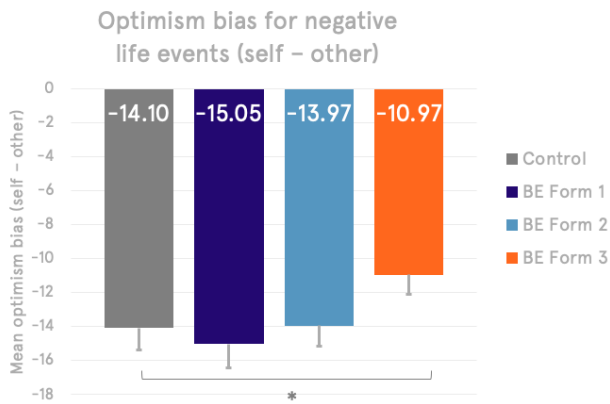


Figure 3.

Mean optimism bias for negative life events for themselves relative to someone similar to them in age and sex.

Participants were asked to rate the likelihood that three negative life events (e.g., getting defrauded, scammed or financially exploited) would happen to them as well as to someone similar to them in age and sex. These ratings were used to compute an optimism bias score (self - other). Participants shown the control form displayed a mean optimism bias score of -14.1%, indicating that they subjectively estimate that they are approximately 14% less likely to experience negative life events compared to someone similar to them in age and sex (see Figure 3). Compared to control participants, participants shown BE form 3 displayed a statistically significantly lower optimism bias score of -10.97%, indicating that did not underestimate the likelihood of negative life events as strongly. Participants shown BE form 1 and 2 displayed mean optimism bias scores of -15.05% and -13.07% respectively (not significantly different from control). These findings show that out of all the BE forms tested, BE form 3 significantly reduced participants' optimism bias for negative life events.

Suggested Guidelines

We found that BE form 3 increased participants' willingness to appoint a TCP by approximately **23%** relative to the control form. Furthermore, relative to the control form, BE form 3 also increased participants' objective comprehension of a TCP and reduced optimism bias. Based on these findings, we propose the following guidelines to consider when establishing the best practices for obtaining TCP-related information from older investors.

1. Present information about the role of a TCP in a clear, simplified manner. Participants who indicated that they would appoint a TCP displayed significantly higher objective comprehension scores relative to participants who did not. This indicates that comprehension of the role of a TCP—the prescribed circumstances under which a TCP may be contacted, the information that may be disclosed to the TCP, and the steps a TCP may take—can be an important predictor of an individual's willingness to appoint a TCP.
2. Inform vulnerable and older investors about the likelihood of financial exploitation or fraud. Participants who were shown BE form 3, which contained a debiasing statement informing them of the potential risk of financial exploitation and fraud and associated consequences, were significantly more likely to indicate that they would like to appoint a TCP. BE form 3 also significantly reduced the tendency for people to underestimate the likelihood that negative life events will happen to them. Making vulnerable and older investors aware of the possibility of financial exploitation and fraud, along with the potential losses they can experience, may be an important predictor of an individual's willingness to appoint a TCP.
3. Inform vulnerable and older investors about the social norms associated with appointing a TCP. Participants who were shown BE form 3, which contained a statement about the attitudes that other investors hold regarding appointing a TCP, were significantly more likely to indicate that they would like to appoint a TCP. Informing older investors about the attitudes of other investors with regards to appointing a TCP may help increase an individual's willingness to appoint a TCP.
4. Present the option to appoint a TCP as an active choice. Asking an investor to appoint a TCP by presenting the option as an active choice to appoint a TCP (or not) can help reduce procrastination by triggering loss or regret aversion and encourage them to take action. This method is an effective way of asking an investor to appoint a TCP while still preserving their autonomy and decide what is best for themselves.
5. Positive or negative priming vulnerable or older investors prior to informing them about a TCP is not recommended. Participants who were shown BE form 1 and 2, which contained either negative or positive priming (respectively), performed no differently relative to participants shown the control form. Going forward, presenting investors with a priming statement prior to informing them about a TCP and asking if they would like to appoint a TCP is not recommended.

Appendix I: Experimental Control Form

Trusted Contact Person Information

We are required to ask you for the name and contact information for a person that you trust to assist us in protecting your investments. This person does not make any decisions on your behalf. We would contact this person to confirm or make inquiries about any of the following:

- Possible financial exploitation affecting you or your account
- Your current contact information.
- Concerns about your mental capacity as it relates to financial decision making
- The identity of any legal guardian, executor, trustee or other personal or legal representative

If you would like to appoint a TCP, please fill out the form below:

Mr.

Mrs.

Ms.

Dr.

Suffix

Jr.

Sr.

First Name

Middle Name

Last Name

Address

Apt./Suite No.

City

Province

Postal Code

Country

Work Phone

Home Phone

Mobile Phone

Email Address

Relationship to Primary Applicant/Co-Applicant: _____



Appendix II: Experimental Behavioural Forms



BE Form 1

Negative Priming:

Before reviewing the form, please take a moment to reflect on a time that you made a poor financial decision.

Trusted Contact Person Information

Canadians lose billions of dollars to frauds and scams every year. Older investors are more likely to be victims of these crimes.

We are required to ask you for the name and contact information for a person that you trust to assist us in protecting your investments. This person does not make any decisions on your behalf. We would contact this person to confirm or make inquiries about any of the following:

- Possible financial exploitation affecting you or your account
- Your current contact information.
- Concerns about your mental capacity as it relates to financial decision making
- The identity of any legal guardian, executor, trustee or other personal or legal representative

90% of Canadians support the idea of appointing a trusted contact person to help protect their money.

If you would like to appoint a TCP, please fill out the form below:

Mr.
 Mrs.
 Ms.
 Dr.
Suffix
 Jr.
 Sr.

Relationship to Primary Applicant/Co-Applicant: _____



www.BEworks.com



BEworks



BEworks



BEworksInc



BEworksInc