

The role of narratives and vividness on the intention to acquire
pension information

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Abstract

Pension planning has become increasingly more important in the past decade. Therefore, policymakers need to have the right tools to promote the search for pension information. This way people can become responsible for their pension situation. This study focuses on the effect of narratives and vividness on the intention to acquire pension information. Narratives are stories, often told in a personal way. Vividness is the level of engagement one has with a story and the level of clearness one has with the message. Both narratives and vividness have shown to be effective at increasing the knowledge of certain subjects in general health. Narratives and vividness have also shown to increase the intention to engage in health-promoting behaviour. This study builds on previous research and focuses on the role of text-based (vivid) narratives on perceived self-efficacy and perceived benefits of the Retirement Belief Model and the intention to acquire pension information. This is researched using a randomized controlled trial with a factorial design using four conditions (vivid narrative, non-vivid narrative, non-narrative and control group). The study used a text which participants read before answering the survey as part of the manipulation. Data was gathered through a survey sent out using various social media platforms which resulted in 161 responses. The results show that neither narratives nor vividness has a positive significant effect on perceived self-efficacy, perceived benefits and the behavioural intention to acquire pension information. Mixed results show the narrative being better than the non-narrative for the behavioural intention to acquire pension information but the non-narrative being better than the narrative for increasing perceived-self efficacy and perceived benefits. The same insignificant results are found for vividness. Vividness does not have a significant positive and in no case does vividness result in a higher mean for perceived self-efficacy, perceived benefits and behavioural intention than the non-vivid conditions. Indicating that vividness does not play a role in retirement narratives.

Keywords: narratives, retirement, pension, communication, Retirement Belief Model, vividness, behavioural intention to acquire pension information

Table of contents

1	Introduction	5
2	Research on this topic	9
2.1	<i>Behavioural change models in health</i>	9
2.2	<i>Framing</i>	11
2.3	<i>Narratives</i>	12
2.4	<i>Elaboration Likelihood Model</i>	13
2.5	<i>Vividness</i>	15
3	Hypotheses development	17
3.1	<i>(Vivid) narratives and perceived self-efficacy and perceived benefits</i>	17
3.2	<i>(Vivid) narratives and behavioural intention</i>	18
3.3	<i>Conceptual model</i>	19
4	Methodology	20
4.1	<i>Study overview and design</i>	20
4.2	<i>Manipulations</i>	20
4.3	<i>Sample and experimental procedure</i>	21
4.4	<i>Measurement and assessment</i>	21
5	Results	25
5.1	<i>Demographics</i>	25
5.2	<i>Manipulation check</i>	25
5.3	<i>Narrative vs non-narrative</i>	25
5.4	<i>Vivid text vs non-vivid text</i>	26
5.5	<i>Behavioural intention</i>	26
5.6	<i>Control variables</i>	28
5.7	<i>Overview of results</i>	30
6	General discussion	31
7	Conclusion	33
7.1	<i>Managerial contributions</i>	33

7.2	<i>Theoretical contributions</i>	34
7.3	<i>Limitations and further research</i>	35
8	References	36
9	Appendix	40
9.1	<i>Braun's survey</i>	40
9.2	<i>Narratives and non-narrative</i>	45
9.3	<i>Demographics</i>	48

Tables and figures

Table 1:	Scale reliability	22
Table 2:	Overview of effects of the narrative on the core beliefs and behavioural intention compared to the other manipulations	30
Table 3:	Overview of effects of the vivid narrative on the core beliefs and behavioural intention compared to the other manipulations	30
Table 4:	Overview of effects of the vivid narrative on the core beliefs and behavioural intention compared to the other manipulations when controlling for being badly informed.....	30
Table 5:	Overview of effects of the vivid narrative on the core beliefs and behavioural intention compared to the other manipulations when controlling for being badly informed.....	30
Table 6:	Gender demographics	48
Table 7:	Age demographics	48
Table 8:	Education demographics.....	49
Table 9:	Income demographics	49
Figure 1:	OECD - Long-term interest rates (OECD, 2020).....	6
Figure 2:	Conceptual model.....	19

1 Introduction

In the Netherlands, pension consists of three pillars, the first being a state pension that a citizen receives once they reach the age of 66 years and 4 months in 2021. The second pillar is a pension that is built up via the employer through a pension fund. The third pillar consists of saving for retirement individually (De Nederlandsche Bank, n.d.).

To determine how much pension a pension fund can pay its participants once they reach the age of retirement, a solvency ratio is used. This ratio dictates how much pension a pension fund can pay its participants once they reach the age of retirement (Dillard, Dal Cin, Zikmund-Fisher, & Ubel, 2010). The ratio has to be at least 104% as mandated by Dutch law. This means that a pension fund needs to have at least 104% worth of assets under management for the pensions that must be paid on a certain date. If a firm's solvency is below 104% for a prolonged period – at least 5 years – a pension fund has to take action by lowering pensions or by increasing pension fees. If solvency is above 110% then a pension fund is allowed to increase pensions (De Nederlandsche Bank, n.d.).

To calculate a participant's future pension, funds use interest percentages to estimate how much pension they can pay a participant once they retire. If interest rates are 1% the participant has to pay €90.53 to have a pension of €100 in ten years for example. Higher interest rates mean that a pension fund needs less money to be able to have a solvency ratio of 104% (De Nederlandsche Bank, n.d.).

In recent years this has become a problem due to decreasing interest rates and people living longer. The average interest rate at the end of 2006 was 4.3%. 10 years later the rate has declined to 1.4%. This means that funds need to have higher fees to have a solvency ratio of 104% (Mercer, 2017). Interest rates are decreasing due to decreasing bond interest rates. Interest rates have been decreasing since 1980 as is seen in figure 1. This is an issue because pension funds are relying on long term fixed-interest bonds to spread risk. For example, ABP, the Dutch pension fund for government and education employees, uses a spread of 60/40. ABP invest 60% of their assets in higher-risk assets like stocks and real estate and 40% in bonds. ABP does this to assure a fair interest rate at an acceptable risk level. Historically this resulted in a 7% return per year, however with bond interest rates decreasing this has since been adjusted to an expected return of 4% per year (ABP, 2020). This means that a participant now has to pay a pension fund, €67.56 for €100 in ten years at an interest rate of 4% compared to €50.83 at an interest rate of 7% historically, an increase of nearly 33% in paid fees.

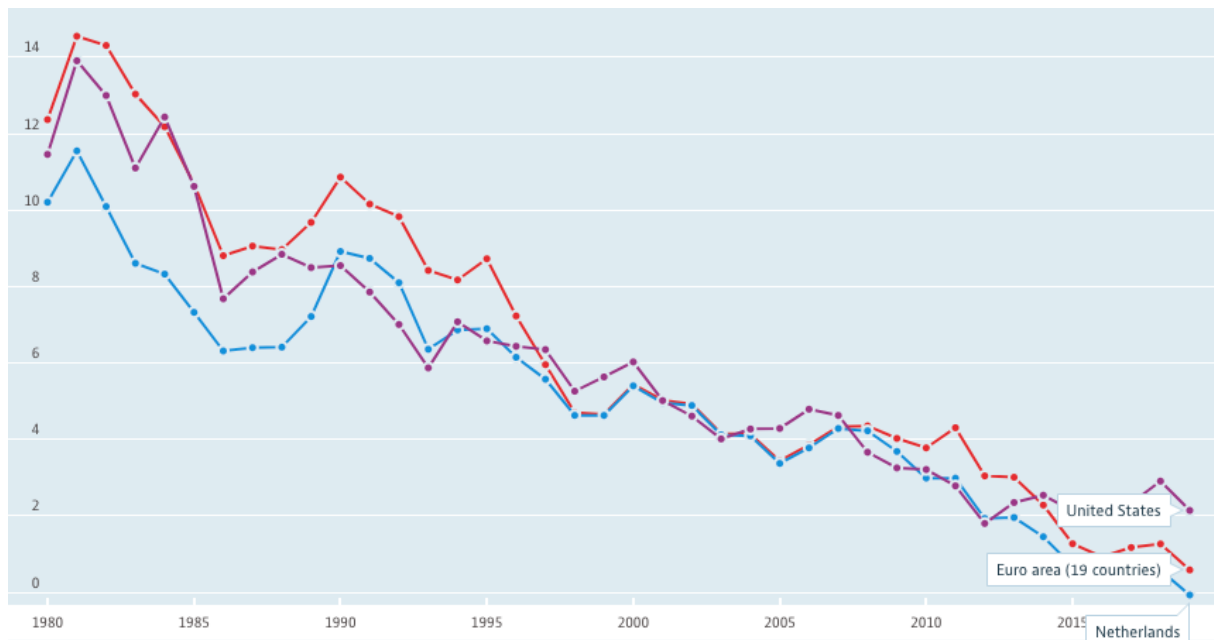


Figure 1: OECD - Long-term interest rates (OECD, 2020)

In 2011 research concluded that many Dutch households do not plan for retirement. Additionally, 10% of households struggle to make ends meet and 40% would have trouble paying for unforeseen expenditures. It was also concluded that many households do not have a long-term financial orientation. This includes people that are 5 to 10 years away from retirement (Van Rooij, Lusardi, & Alessie, 2011). These people often have unrealistic expectations about the amount of pension that they will receive and think that their pension will be sufficient to provide them with the necessary income that they need to live the same lifestyle as they did before retirement (Wijzer in geldzaken, 2013).

It is therefore important for people to start acquiring pension information since there is a possibility that their pension might be lower than they are expecting. Planning for retirement can be complex and it is therefore important to make people aware of how they can find pension information. Some people are aware of the gap in their income yet still do not seek information (Wijzer in geldzaken, 2017). This is due to a preference for immediate pleasure versus pleasure in the future. People would rather do pleasurable things now than do unpleasurable things now which will result in pleasurable results in the future (Hershfield, et al., 2011). People not being aware of their pension situation could be due to information avoidance which is a big issue in the field of information dissemination. Information avoidance is largely due to information being seen as irrelevant or non-valuable (Golman, Hagmann, & Loewenstein, 2017).

In 2017, Eberhardt, et al. introduced the Retirement Belief Model that tries to explain why people search for pension information or why they do not search for pension information. This model is based on the Health Belief Model by Rosenstock (1974) which is one of the best-

known models in this field and tries to explain why or why not people engage in health-promoting behaviour. The Retirement Belief Model consists of five core beliefs. These five core beliefs determine whether or not someone searches for pension information. The Retirement Belief Model's five core beliefs are perceived self-efficacy, perceived benefits, perceived severity, perceived susceptibility and perceived barriers. To trigger these core beliefs, a cue to action is needed. Unfortunately, it is still relatively unclear what exactly is needed to trigger the five core beliefs and have people search for pension information.

It is possible that perceived self-efficacy, perceived benefits, perceived severity, perceived susceptibility and perceived barriers can be influenced through narratives and framing (Dillard, Dal Cin, Zikmund-Fisher, & Ubel, 2010) (Eberhardt, Brügger, Post, & Hoet, 2017b). Narratives are ways to present information in a more personal way (Kreuter, et al., 2007). For example, a personal story about a person who went to the doctor to get screened for cancer compared to a static commercial. Framing is adapting the wording but not the context of the text (Yang, 2020) and is used in different contexts to activate people to engage in certain behaviour. Both methods have shown to be effective at persuading people to engage in health-promoting behaviour. Examples are having people conduct self-breast examinations or preventing drug use after reading a narrative (Meyerowitz & Chaiken, 1987) (Banerjee & Greene, 2012).

In 2018 Braun researched the effect of narratives and framing on the Retirement Belief Model's five core beliefs. Braun concluded that only perceived severity is significantly influenced through narratives. In this study, an animation-based narrative using different types of frames, one being a gain frame and the other being a loss frame was used. Research by de Graaf, et al. (2016) suggests that the type of narrative, for example, animation-based, text-based, movies does not matter when looking at the level of persuasion. However, this research is based on general health and not specifically the retirement setting. Since general health is more imminent than retirement, it is assumed that a different type of narrative, for example, a text-based narrative could make a difference in persuading people to acquire pension information.

In Braun's research it is mentioned that vividness in a narrative might be a factor that could increase the five core beliefs and this must be further researched. Vividness has been shown to have a significant impact on health knowledge and health-promoting behaviour (Dillard & Main, 2013). In a 2019 study by Ophir, et al. different types of vivid elements were used on cigarette packs. The result of the study showed that cigarette packs with vivid elements

were more likely to persuade people to quit smoking than cigarette packs without vivid elements.

This paper researches the effect of text narratives and vivid text narratives on the behavioural intention to search for pension information and on perceived self-efficacy and perceived benefits, two core beliefs of the Retirement Belief Model by Eberhardt, et al. (2017). The effect of narratives on perceived self-efficacy and perceived benefits were not proven significantly different from the non-narrative condition; however, the means of perceived self-efficacy and perceived benefits on a 7-point Likert scale were higher than the non-narrative and control group averages. Therefore, there is reason to believe that a different type of narrative could lead to a significant positive difference thus resulting in evidence that narratives aid in increasing perceived self-efficacy and perceived benefits.

This paper makes three contributions to existing literature. First, it elaborates on Braun's study which tries to persuade people to acquire pension information using narratives. Perceived self-efficacy and perceived benefits have been proven insignificant; however, it is of interest to know whether or not significance can be achieved by using a different type of narrative. Second, this paper contributes to earlier research by De Graaf, et al. (2016) which states that the type of narrative does not matter when looking at the level of persuasion. It is of interest to know if this also applies in the retirement setting specifically since the study focussed on general health which is more imminent than retirement. Third, this paper tests the effect of vividness in the retirement setting. Studies using vividness done on general health showed that vividness can be successfully used in persuading people to engage in health-promoting behaviour. For example, studies on colon cancer using vividness lead to an increase in knowledge on colon cancer and the intention to be screened for this disease.

The remainder of this paper is structured as follows. First, research on this topic is discussed. Specifically the Health Belief Model, the Retirement Belief Model, framing, narratives, the Elaboration Likelihood Model and vividness. After this has been discussed, the hypothesis development will be laid out where the six hypotheses of this study are discussed. Next is the methodology of the study at hand. Then, the results are discussed followed by a general discussion and the conclusion of this study.

2 Research on this topic

In this chapter, research on this topic will be discussed. First, the Health Belief Model on which the Retirement Belief Model is based. The second topic is the Retirement Belief Model. Third, is framing followed by the fourth topic, narratives. The fifth topic is the Elaboration Likelihood Model which tries to explain why people accept or reject message claims. The sixth and last topic that is discussed is vividness and the role of vividness in narratives and health communication.

2.1 Behavioural change models in health

2.1.1 The Health Belief Model

Extensive research has been conducted to explain why people engage in health-promoting behaviour. Trying to predict this behaviour can be difficult hence why various models have been introduced to try to predict behaviour. One of the most well-known models of predicting health-promoting behaviour is the Health Belief Model by Rosenstock (1974). The Retirement Belief Model by Eberhardt, et al. (2017) is largely based on this model and it is therefore important to discuss the Health Belief Model first before discussing the Retirement Belief Model. The Health Belief Model suggests four factors that determine whether or not a person engages in certain health-promoting behaviour.

The first factor is **perceived susceptibility**. Perceived susceptibility consider the subjective assessment of the risk of developing a health-related problem like a disease. If a person has a high perceived susceptibility, they are more likely to engage in behaviour that will reduce the risk of developing the health problem. If the person has a low perceived susceptibility, they are less likely to engage in behaviour that will reduce the risk of developing the health problem. The second factor is **perceived severity**. Perceived severity assesses the severity of a health-related problem and the potential consequences of this problem. This factor takes beliefs about a disease such as if it is life-threatening or not and if it will cause pain into consideration. Additionally, perceived severity assesses the potential effects of the disease on social and work life. People with high perceived severity are more likely to engage in behaviour that reduces the risk of attracting the health problem compared to people with low perceived severity that are less likely to engage in behaviour that reduce the risk of attracting the health problem. The third factor is **perceived benefits**. Perceived benefits consider the potential benefits that certain behaviour has on one's health. For example, people who believe that sleeping eight hours per day is beneficial for their long-term health are more likely to sleep for

eight hours per day compared to people who do not believe that sleeping eight hours per day will result in long-term health benefits. The fourth and last factor is **perceived barriers**. Perceived barriers are the opposite of perceived benefits and consider the downsides of engaging in certain health-promoting behaviour. For example, going to the dentist to fill a cavity could result in pain, stress and discomfort, even though filling the cavity will result in health-related benefits in the long term. Perceived benefits must outweigh perceived barriers for people to engage in health-promoting behaviour (Rosenstock, 1974).

To trigger the four factors that need to be considered, a cue to action is needed. The cue to action serves as the medium to create awareness of a certain health problem. A cue to action can be a symptom, for example, toothache, or mass-media communication such as the health warnings on cigarette packs (Janz & Becker, 1984). If the cue to action is not present, people will continue to do what they are doing and will not consider the health implications that their actions have.

The Health Belief Model has shown to be an effective tool in real-life studies. In a 2019 study by Jeihooni and Rakhshani, educational interventions showed to be an effective method to adopt skin cancer preventive behaviour based on the Health Belief Model.

2.1.2 The Retirement Belief Model

In 2017, Eberhardt, Brügggen, Post and Hoet introduced the Retirement Belief Model. This model aims to get a better understanding of the factors that influence the intention to acquire pension information. The Retirement Belief Model is inspired by the Health Belief Model. Being inspired by the Health Belief Model, the Retirement Belief Model uses the same four factors; perceived susceptibility, perceived severity, perceived benefits and perceived barriers and adds one factor called: perceived self-efficacy. Totalling to five factors which are called core beliefs in the Retirement Belief Model.

The four core beliefs that are based on the Health Belief Model are the same in the Retirement Belief Model only being formulated differently. In the Retirement Belief Model, these beliefs are formulated as follows. “**Perceived severity**: they need to believe that the consequences of not informing themselves are severe. **Perceived susceptibility**: they need to believe that they are at risk of experiencing an undesirable outcome such as a pension gap. **Perceived benefits and barriers**: they need to think that the benefits of getting information outweigh the costs.” (Eberhardt, Brügggen, Post, & Hoet, 2017a, p. 5). The Retirement Belief Model adds perceived self-efficacy as an extra core belief for a total of five core beliefs.

Perceived self-efficacy considers whether or not people believe that they can perform the recommended behaviour that will result in acquiring pension information (Eberhardt, Brüggem, Post, & Hoet, 2017a).

The Retirement Belief model has become increasingly more important due to changes in demographics, economic changes and political changes which has led to lower pension certainty by pension funds (Van Binsbergen, Broeders, De Jong, & Koijen, 2014). Understanding the factors that lead to people acquiring pension information is necessary to counteract pension uncertainty. As was shown in the Health Belief Model, a cue to action is needed to activate the factors that lead to engaging in health-promoting behaviour.

Various research has shown that framing and narratives can aid in activating a cue to action for people to engage in health-promoting behaviour (Eberhardt, Brüggem, Post, & Hoet, 2017a; Homer & Yoon, 1992). In the following two paragraphs, framing and narratives are discussed.

2.2 Framing

Framing theory focuses on how text is presented to an audience. Framing is changing the wording, but not the context of the text (Yang, 2020). It can be used to nudge people in a certain direction. Framing effects can be used to shape mass opinion. This occurs when a small change in wording causes a big change in opinion.

2.2.1 Framing for behavioural change

Framing will influence people's behaviour as has been shown in several studies. There are three different types of framing: goal framing, standard risky choice framing and attribute framing. Goal framing issues are framed in two different ways, one being positive and the other being negative (Levin, Schneider, & Gaeth, 1998). Standard risky choice framing is when different frames lead to different decisions. People in the gain frame – the positive frame – are more risk-averse and people in the loss frame – the negative frame – are more risk-seeking when making decisions in life (Kahneman & Tversky, 1974). Lastly, attribute framing is a type of framing where attributes of a product or service are positively or negatively displayed. For example, a positive frame would be the percentage of operations that succeed versus the percentage of operations that fail in a negative frame (Levin, Schneider, & Gaeth, 1998).

The effectiveness of a frame may depend on the level of issue involvement related to the Elaboration Likelihood Model¹ by Petty and Cacioppo (1986) (Maheswaran & Meyers-Levy, 1990). The model explains why some people accept and other people reject message claims. A loss frame is more suitable when issue involvement is high, whilst a gain frame is more suitable when issue involvement is low (Maheswaran & Meyers-Levy, 1990). In later years research focused more on the outcome of proposed behaviour when looking at the effectiveness of each frame. Gain frames are effective when addressing actions with certain outcomes. Loss frames are effective when addressing actions with uncertain outcomes (Rothman & Salovey, 1997). In the retirement context, framing can also be effective. Different gain and loss frames have shown to affect the intention to acquire pension information (Eberhardt, Brügger, Post, & Hoet, 2017b). In 2018, Braun showed that a gain frame is more effective at persuading people to acquire pension information than a loss frame is.

In earlier years, research on cues to action focussed mainly on mass media messages. However, people show defensive reactions to mass media which has led to goal framing in mass media becoming insufficient at promoting preventive behaviour. The reader can easily avoid or consider the cues as irrelevant to themselves because these cues have been presented in a non-involving objective form (Marlier, 1993). Information avoidance occurs when the provided information is seen as not valuable (Golman, Hagmann, & Loewenstein, 2017). Resistance to a persuasive message comes in many forms; counter-arguing, ignoring or denying the validity of the message. A successful approach to prevent the resistance to these messages is using narratives (Kreuter, et al., 2007). Framing can be used in a story to smooth persuasion, decrease counter-arguing and increase the effectiveness of the cue to action.

2.3 Narratives

Narratives are a way to approach the Health Belief Model's cue to action and therefore are a way to trigger the five core beliefs of the Retirement Belief Model. Narratives can be presented in first person or third person and delivered in various ways such as text, video or audio. Narratives also have various forms with soaps, warnings and advertisements being some of these forms (De Graaf, Sanders, & Hoeken, 2016).

The reason why narratives are used can have one or multiple of five reasons. First, narratives can be used to provide information (Jibaja-Weiss, et al., 2006). For example,

¹ More information about the Elaboration Likelihood Model can be found in paragraph 2.4.

presenting complex information in a narrative could enhance information processing, storage and retrieving (Schank & Berman, 2002). Second, narratives can be used to make information more engaging. People are more engaged with narratives than with static messages (Cox & Cox, 2001). Third, using narratives can lead to certain behaviour, called target model behaviour (Volk, et al., 2008). These actions can be health-positive actions. Fourth, narratives are used to persuade a target population to engage in certain behaviour. Fifth, narratives are used to provide comfort (Kreuter, et al., 2007).

Model target behaviour and persuading a target population are important for this research. If done successfully, these two purposes can be used to alter behaviour (Shaffer & Zikmund-Fisher, 2013). One type of model target behaviour is a step-by-step demonstration of what a person should do. When successful, model target behaviour could influence the attitude towards perceived benefits and perceived severity. Model target behaviour has also shown to be an effective way to develop self-efficacy. Model target behaviour becomes more effective when the person watching the narrative can identify themselves with the actor in the narrative that shows a specific behaviour (Kok, et al., 2016). Using narratives has also shown to overcome avoidance behaviour (Bandura, Grusec, & Menlove, 1967). Narratives that use target model behaviour can therefore be used to reduce information avoidance of the message.

Stories have shown to be an effective way to change beliefs and to motivate certain behaviour in healthcare (Green, 2006). Narratives are also used to educate people in healthcare (Van Laer, De Ruyter, Visconti, & Wetzels, 2014). Entertaining narratives are one of the most effective narratives to reach one of the goals mentioned above. When narratives are entertaining, they are more successful than non-narratives that are less entertaining (Moyer-Gusé, 2008). The reason that narratives tend to be more effective than non-narratives is that less counter-arguing and disbelief occurs due to reduced cognitive responding (Green & Brock, 2000). The next paragraph further elaborates on why this occurs and why people reject or accept message claims.

2.4 Elaboration Likelihood Model

In 1986 Petty and Cacioppo introduced the Elaboration Likelihood Model. This model aims to explain why people accept or reject message claims and provides a theory that tries to understand attitude change for traditional persuasive messages (Petty & Cacioppo, 1986). According to the Elaboration Likelihood Model, elaboration of the message is what the persuasive effect is dependent upon. Petty and Cacioppo describe elaboration in a persuasive

context as: “the extent to which a person thinks about the issue-relevant arguments contained in the message” (Petty & Cacioppo, 1986, p. 128). Two routes underlie the elaboration process. The central route showing high elaboration of the message and the other route, the peripheral route, showing low elaboration of the message. When there is a need for cognition and the information is highly relevant for the receiver, the central route is taken. The peripheral route is taken when the information is of low relevance to the receiver (Petty & Cacioppo, 1986). This means that more elaboration on the message occurs when the message is important. This results in higher information processing and changed behaviour. However, people’s motivation is also a factor when looking at the level of elaboration and the ability to engage in issue relevant thinking (Petty & Cacioppo, 1986).

When applying the concept of information processing to current research a new model is needed to better explain the persuasive effects of narratives. The Elaboration Likelihood Model is not fully relevant for narratives since the reader tends to be more immersed into the story. This leads to less counter-arguing and less careful evaluation of the arguments (Van Laer, De Ruyter, Visconti, & Wetzels, 2014). Therefore, in 2002 Slater and Rouner introduced the Extended Elaboration Likelihood Model. In the Extended Elaboration Likelihood Model elaboration and engagement of the reader reading the narrative does not solely depend on the content. The plot, storyline, absorption into the story, identification with the character and emotions that arise are also taken into consideration in this model (Slater & Rouner, 2002). For non-narrative text, the reader must be faced with personally relevant consequences. Otherwise, the persuasive effect might not occur. However, the persuasive effects of narratives occur without careful evaluation. Narratives are therefore more applicable to a wider range of people. Narratives have higher involvement due to transportation into the story and the persuasive effects are therefore mostly unintentional (Van Laer, De Ruyter, Visconti, & Wetzels, 2014). Thus, readers of narratives are more responsive to persuasive messages. This is because the persuasive information is processed less analytical, and this leads to less counter-arguing compared to non-narratives where the information is processed more analytical. The reader does make cognitive efforts when reading narratives but is less thoughtful and critical about the received message (Slater & Rouner, 2002). When looking at target model behaviour, the (unintentional) processing of the persuasive message leads to adopting the target model behaviour as no counterarguments evolve. It also leads to a theory called the sleeper effect introduced by Appel and Richter (2007). This theory claims that fictional narratives that “do not claim to provide the reader with detailed knowledge about the world” are more persuading than non-narrative messages (Appel & Richter, 2007, p. 113).

2.5 Vividness

Vividness is the extent to which a message is clear. It specifically refers to the extent to which a message is “emotionally interesting, concrete and imagery provoking, proximate in a sensory, temporal, or spatial way (Nisbett & Ross, 1980, p. 45)

Vividness consists of three components: (A) emotional interest, (B) concreteness and (C) proximity (Nisbett & Ross, 1980). (A) Emotional interest is characterised by “the nature of one’s acquaintance with the participants of the event” (p. 45) and “the hedonic relevance of the event to the participant” (p. 46). (B) Concreteness means the degree of detail in the message. (C) Proximity refers to the way the information was received and whether or not the reader is in close proximity to the message (Nisbett & Ross, 1980). In layman’s terms, this means that (A) a message is vivid if the reader is familiar with the subject, for example, a message about a football match will result in emotional interest with a reader if they are a football fan. (B) A message will be vivid if the information is clear and detailed. (C) A message will be vivid if the proximity of the message is high. High proximity will occur when, for example, the protagonist of the story has the same demographic features as the reader or when the reader has experienced the same life events as the protagonist.

Various studies have shown that vividness can be an important factor to (a) increase engagement with a message, (b) make the message more persuasive, (c) increase knowledge on a certain subject and (d) increase certain behavioural intentions. A 2019 study by Ophir, Brennan, Maloney and Cappella on vividness on message engagement and the intention to quit smoking showed that vivid warning labels with multiple vivid elements led to a higher increase in message engagement and the intention to quit smoking than the vivid warning labels with less vivid elements. In 2013 it was shown that vividness has a significant impact on the knowledge of colon cancer and the intention to be screened for this disease (Dillard & Main, 2013).

Vividness and the level of vividness in a message can be created in various ways. Using the study by Ophir, et al. (2019) as an example, the level of vividness was designed in five different ways. The lowest level of vividness was created using a testimonial image of a victim of tobacco usage who was in a hospital. This way, the authors of the study tried to manipulate the degree of proximity, emotional interest and concreteness. The second way to increase vividness was to add identifying information which was used by the authors to increase concreteness by “providing the name of the victim and the age at which she or he was affected

by tobacco (e.g., “Terrie: Died from cancer at age 53”). (Ophir, Brennan, Maloney, & Cappella, 2019, p. 6). The third level of vividness was added by describing the effects that smoking had on one’s body. For example, chest pain and heart attacks. This was done to manipulate the level of concreteness, proximity and emotional interest. The fourth level of vividness was added by adding quotes from victims of tobacco. This was done to manipulate emotional interest and concreteness. In this case, the quote was: “Smoking kills half of all lifetime smokers. Terrie died from cancer caused by smoking. Terrie had some advice for other smokers: Please quit... I don’t want anyone to have to go through what I went through)” (Ophir, Brennan, Maloney, & Cappella, 2019, p. 7). The fifth and last level of vividness was added by adding contextual information thereby manipulating the emotional interest of the message. On the package, it was stated that tobacco companies try to deceive customers by saying that the health effects of smoking are not as severe as is claimed by research.

3 Hypotheses development

In the following chapter, the hypotheses development is discussed. The hypotheses are developed based on previous research on tries to further elaborate on this research. Six hypotheses will be assessed in this research.

3.1 (Vivid) narratives and perceived self-efficacy and perceived benefits

It has been shown that narratives can positively influence behaviour and attitude in healthcare. Narratives have also shown to be more persuasive than non-narratives (Slater & Rouner, 2002). Narratives have a partly significant positive effect on the five core beliefs in the retirement belief model with perceived severity being significant when using an animation-based narrative (Braun, 2018). In this paper, the effect of text-based narratives on perceived self-efficacy and perceived benefits are researched.

Research by De Graaf, Sanders and Hoeken (2016) shows that every type of narrative should have the same persuasive effectiveness. However, this study was conducted on general health which is more imminent than retirement which is often far away. It is therefore assumed that different types of narratives can have different types of persuasive effectiveness in the retirement setting. Second, people do not enjoy doing unpleasurable things now that will result in pleasurable things in the future when looking at retirement. People do not enjoy searching for pension information since they think that it will be hard or because they do not see the benefits associated with searching for pension information (Hershfield, et al., 2011). This results in people being inadequately informed about their retirement as was shown in multiple pension monitors by Wijzer in Geldzaken (2013 & 2017). Therefore, it is of theoretical importance to find ways to decrease the feeling of searching for pension information being hard and to increase the knowledge of the associated benefits of searching for pension information.

Braun (2018) showed that only perceived severity was significant through narratives. In this paper, the effect of text-based narratives on perceived self-efficacy and perceived benefits are researched. It is assumed that perceived self-efficacy and perceived benefits can significantly increase through narratives due to the means of these two core beliefs being higher than the non-narrative condition and the control group in Braun's study. It is therefore hypothesized that a different type of narrative, in this case, a text-based narrative, can lead to a significant increase in perceived self-efficacy and perceived benefit compared to the non-narrative and the control group.

- H1a: Text narratives increase perceived self-efficacy more than text non-narratives
- H1b: Text narratives increase perceived benefits more than text non-narratives

Current research shows that narratives only have a partly significant effect on the five core beliefs. Current research does not specify what the effect of vividness in a retirement-related narrative is.

Narratives in general are more likely to persuade someone compared to a non-narrative (Slater & Rouner, 2002). Multiple health-promoting studies have shown that vividness has a positive effect on promoting healthy behaviour. Dillard & Main (2013) showed that vividness led to an increase in knowledge on colon cancer and the intention to be screened for this disease. Ophir, Brennan, Maloney and Cappella (2019) showed that vividness led to an increase in message engagement and the intention to quit smoking using multiple vivid elements.

Various studies have shown that vividness can be an important factor to (a) increase engagement with a message, (b) make the message more persuasive, (c) increase knowledge on a certain subject and (d) increase certain behavioural intentions. Therefore it is hypothesized that the same effect can be achieved using vividness in a retirement-related narrative.

- H2a: Vivid text narratives increase perceived self-efficacy more than non-vivid text (non-)narratives
- H2b: Vivid text narratives increase perceived benefits more than non-vivid text (non-)narratives

3.2 (Vivid) narratives and behavioural intention

Research shows that increased perceived self-efficacy, perceived benefits and perceived susceptibility increase behavioural intention to engage in health-promoting behaviour (Gerend, Shepherd, & Monday, 2008). Research also shows that narratives can aid in increasing the behavioural intention to engage in health-promoting behaviour (Slater & Rouner, 2002) (Green, 2006). Additionally, narratives can be a successful tool to increase knowledge on certain topics (Van Laer, De Ruyter, Visconti, & Wetzels, 2014).

The study aims to increase the knowledge on how to get people to start acquiring pension information. This is done by increasing the knowledge of the effect of narratives on the Retirement Belief Model but also by increasing the knowledge of narratives on the behavioural intention to search for pension information. This is important since people do not start saving

early enough for retirement and people often are not well educated enough on this topic (Lusardi & Mitchell, 2011). Since narratives have shown to be effective at increasing knowledge and behavioural intention in health-related studies, it hypothesized that narratives have the same effect on the behavioural intention to acquire pension information.

- H3: Text narratives increase the behavioural intention to acquire pension information more than text non-narratives

As was said on hypothesis 2, vividness has shown to increase the intention to acquire health knowledge and that vividness is effective at increasing the intention to engage in certain health-promoting behaviour. It is therefore hypothesized that vividness leads to an increase in the behavioural intention to acquire pension information.

- H4: Vivid text narratives increase the behavioural intention to acquire pension information more than non-vivid text (non-)narratives

3.3 Conceptual model

This brings us to the conceptual model. In this study, four treatment groups/conditions will be used. One vivid narrative, one non-vivid narrative, a non-narrative and a control group. This study aims to see if a (vivid) narrative leads to a higher level of perceived self-efficacy, perceived benefits and behavioural intention compared to the other treatment conditions.

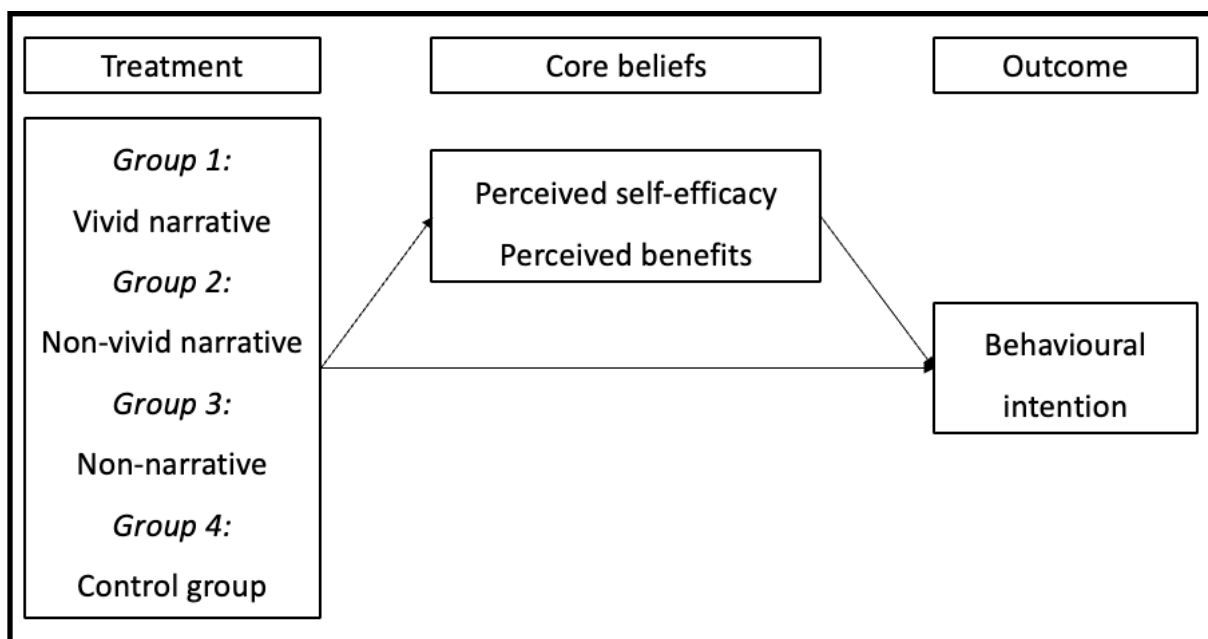


Figure 2: Conceptual model

4 Methodology

4.1 Study overview and design

The purpose of this study is to examine the effect of text-based narratives on the intention to acquire pension information (H3), perceived self-efficacy and perceived benefits (H1a and H1b). Additionally, it is researched if vividness plays a role in increasing behavioural intention (H4), perceived self-efficacy and perceived benefits (H2a and H2b).

The manipulation in this study was either a text narrative or text non-narrative with the narrative being vivid or non-vivid. A control group was included that did not read the text before answering the survey. The text and survey, which can be found in the appendix, was based on the animation videos and survey by Braun (2018). In the narrative, a gain frame is used as opposed to a loss frame since Braun's research suggested that the gain frame is more effective than the loss frame at persuading the participants to acquire pension information compared to the control group. The narrative is in first person since the persuasive effects are greater in this form compared to third person (De Graaf, Sanders, & Hoeken, 2016). The narrative with vividness used two manipulations to create vividness namely: imagination and the words: extremely, easily and awesome. These manipulations have been used before in other health-related experiments (Keller & Block, 1997). According to research by de Graaf, et al. (2016), gender does not influence the persuasiveness of a narrative. To completely prevent gender identification from happening, the Dutch unisex name Robin was used in the narratives. It was expected that most respondents will be students. Therefore, the protagonist in the narrative is 22 years old which was the expected median age of the respondents.

4.2 Manipulations

The two narratives start with the protagonist, Robin who is 22 years old, saying that he/she saw a tv-commercial about retirement planning. In the tv-commercial, Robin sees that it is important to acquire pension information and that you can find this online by going to www.mijnpensioenoverzicht.nl. Robin then talks about his/her current pension situation and that it is important to think about your retirement because it is uncertain what the world will look like in 40 years. Robin also talks about saving a lot of sleepless nights by acting now instead of later and finally says that he/she is happy that he/she did it now and would advise everyone to do the same. In the vivid narrative, Robin talks about that it was shocking that the pension was so little. Also, the sentence 'Just imagine yourself.....' is used two times and the words: extremely, easily and awesome are used. The non-narrative consists of the same

information as the two narratives. The difference is that there is no protagonist who tells the story. The information is in a static way. This should result in less engagement with the story resulting in a lower perceived self-efficacy, perceived benefits and behavioural intention.

4.3 Sample and experimental procedure

The data was collected on Dutch citizens that work and/or study in the Netherlands. Both the survey and different texts were distributed in Dutch. The survey was made using Qualtrics and was spread through WhatsApp, Facebook, Instagram and Reddit. To prevent selection bias, the respondents were randomized into one of four conditions. A small pretest was conducted before sending out the survey to prevent technical issues in the survey and to assess scale reliability which can be found in Table 1.

The survey was sent out in June 2021 and the data was collected within two weeks. The results of the survey are anonymous and partaking in the survey was voluntary. The people that were contacted were 18 years or older. The survey was answered by 161 people. 45 people read the vivid narrative, 40 people read the non-vivid narrative, 41 people read the non-narrative, the remaining 35 people were part of the control group and did not read anything before answering the survey. Demographics of the respondents can be found in appendix 9.3.

4.4 Measurement and assessment

At the start of the survey, respondents were given a small introduction of the study after which they were randomly assigned to a condition. The vivid narrative, non-vivid narrative and non-narrative read a text. The control group did not read a text and went straight to the questionnaire. After a manipulation check, which the control group did not get to answer, the respondents answered questions about behavioural intention, perceived self-efficacy and perceived benefits. After this was done, respondents answered two control variable questions and demographics questions. After the respondents finished filling in the survey they were thanked for their effort, and they were notified that their response had been recorded.

The questions have been used before in Braun's survey who adopted the questions from previous research. Therefore, only Cronbach's Alpha is used to validate reliability. Cronbach's Alpha was measured using the small pre-test carried out before sending out the survey. The results of Cronbach's Alpha can be found below in table 1.

Table 1: Scale reliability

Scale label	M	SD	Number of items	Cronbach's Alpha
Behavioural intention	3.3	2	6	0.77
Perceived self-efficacy	3.9	1.6	3	0.85
Perceived benefits	5.4	1.2	6	0.76

4.4.1 Dependent variables

The three dependent variables of this study are the behavioural intention to acquire pension information, perceived self-efficacy and perceived benefits. Perceived self-efficacy and perceived benefits are measured using measurements taken from Braun (2018) who adapted the questions from Eberhardt, et al. (2017a). Perceived self-efficacy and perceived benefits were measured using a 7-point Likert scale ranging from strongly disagree to strongly agree. Perceived self-efficacy was measured using 3 items, perceived benefits were measured using 6 items. Due to the way the answer options are structured, strongly disagree being at the top and strongly agree being at the bottom, a lower mean on perceived self-efficacy indicates a higher level of perceived self-efficacy. For example, answering strongly disagree when reading the statement: “*Searching for pension information is hard*” indicates that a person has a high level of perceived self-efficacy. Whereas a high mean on perceived benefits does indicate a high level of perceived benefits. For example, answering strongly disagree when reading the statement: “*Searching for pension information is important*” indicates that the respondents have a lower level of perceived benefits.

To measure behavioural intention, measurements from Braun (2018) were used who adopted the measurements from Ajzen and Fishbein (1969) and Triandis (1964). The behavioural intention to acquire pension information was measured using 6 items on a 7-point Likert scale ranging from strongly disagree to strongly agree. In this case, a high mean on behavioural intention indicates that the person is more likely to search for pension information in the future.

4.4.2 Manipulation check

During the manipulation check, participants were asked if they thought that the text contained practical information, if the text felt like it displayed a personal story and if the text made them realize that they should acquire pension information.

4.4.3 Control variables

Two control variables were used in this study: how well respondents are informed about their pension on a scale of 1 to 10 and the number of times a respondent has acquired pension information in the last twelve months.

4.4.4 Data analysis

In total 161 responses were recorded for the survey. First, the manipulation check was analysed to examine whether or not the text was successful at making people realize that they should acquire pension information. Another manipulation check was used to examine if narrative vs. the non-narrative condition thought that text contained practical information and if the different conditions thought that the text displayed a personal story.

To analyse H1a, H1b and H3 a one-way ANOVA was used. The data was split between three conditions: narrative condition, non-narrative condition, and control group. The different questions per topic (behavioural intention, perceived self-efficacy and perceived benefits) were recoded into three variables using the compute command to get the means per topic. These three different variables were used as the dependent factor in the one-way ANOVA. Levene's test was used to check for equal variances. Post hoc testing was done using Tukey's HSD test to examine significant differences between conditions.

The same procedure was carried out to analyse H2a, H2b and H4. The only difference being that the data was split up into four conditions. The vivid condition was added resulting in four conditions: vivid narrative, non-vivid narrative, non-narrative and control group. One-way ANOVA was used to examine differences between conditions. Post hoc testing was done using Tukey's HSD test.

To analyse the effect of the control variables, the data was split into people with low knowledge of their pension and people with high knowledge of their pension. Only the people with low knowledge of their pension were considered for the control variables since these are the people that policymakers want to target. After the data was split, the same procedure was carried out as was done before. Using a Levene's test to test for equal variances, A one-way ANOVA and ultimately a Tukey's HSD test to examine differences between conditions.

In some cases, the test of equal variances was not met. In these cases, Welch's ANOVA was used as opposed to one-way ANOVA and Games-Howell was used for post hoc testing as opposed to Tukey HSD.

A significance level of $p \leq .05$ was chosen for all tests. The data was analysed using SPSS
27.

5 Results

In this chapter, the results of the survey are discussed. Kolmogorov-Smirnov test showed that none of the three variables met the requirements for normality: behavioural intention ($p = .012$), self-efficacy ($p = .004$) and perceived benefits ($p = <.000$). Pallant (2013) argues that this is common in larger samples sizes. Additionally, the Central Limit Theorem argues that normality for sample sizes larger than 30 is not an issue. Furthermore, Levene's tests were used in all tests to test for equal variances.

5.1 Demographics

In total, 161 responses were recorded. The demographics of these respondents can be found in appendix 9.3.

5.2 Manipulation check

To start it is important to know if the different texts led to people realising that they should acquire pension information. The respondents of the survey indicated that the text made them realize that they should acquire pension information ($M = 5.2, SD = 2$) this is 1.2 points above the scale middle of four which indicates that the readers of the text realized that they should acquire pension information. No significance difference is observed between the narrative ($M = 5.4, SD = 2$) and non-narrative condition ($M = 4.8, SD = 2$), ($t(124) = 1.639, p = .104$)

Next is if the respondents thought that the text contained practical information. As was expected, the respondents that read the narrative said that the text contained insignificantly ($t(124) = -1.785; p = .077$) less practical information ($M = 3.9 SD = 1.3$) than to the readers of the non-narrative ($M = 4.5 SD = 1.6$). Additionally, the respondents that read the narrative perceived the narrative significantly ($t(124) = 8.439; p = <.000$) more personal ($M = 5.5 SD = 1.4$) than to the readers of the non-narrative ($M = 3.3 SD = 1.3$).

5.3 Narrative vs non-narrative

H1a The first hypothesis that will be discussed is H1a: "*Text narratives increase perceived self-efficacy more than text non-narratives*". In this case, a lower average means that respondents feel more confident about their ability to acquire pension information.

Levene's test was used to test for homogeneity of variances which came out significant ($p = 0.028$) indicating that equal variances cannot be assumed. Therefore, Welch's ANOVA is used which proved the results significantly different among the three conditions ($F(2, 158) =$

3.667, $p = .013$). Post hoc testing showed significant differences between the groups. The non-narrative condition ($M = 3.4$, $SD = 1.2$) differed significantly from the control group ($M = 4.2$, $SD = 1.1$) but was not significantly different from the narrative condition ($M = 3.6$, $SD = 1.4$). As a result, H1a is rejected.

H1b For hypothesis H1b, perceived benefits are discussed. In this case, a higher average means that the respondent thinks more highly of the associated benefits that acquiring pension information has on their lives. Levene's test was significant ($p = .035$). Welch's ANOVA showed that the results were insignificantly different ($F(2, 158) = .555$, $p = .606$). Post hoc testing showed insignificant differences between the conditions. Narrative condition ($M = 5.5$, $SD = .8$), non-narrative condition ($M = 5.4$, $SD = 1.1$) and control group ($M = 5.6$, $SD = .7$). As a result, H1b is rejected.

5.4 Vivid text vs non-vivid text

H2a The first hypothesis that will be discussed is H2a: "*Vivid text narratives increase perceived self-efficacy more than non-vivid text (non-)narratives*". A test of homogeneity of variances showed insignificant results ($p = .224$) which concluded that equal variances can be assumed. One-way ANOVA showed that the results are significantly different between conditions ($F(3, 157) = 2.442$, $p = .034$). Post hoc testing showed significant differences between the conditions with the non-narrative condition ($M = 3.4$, $SD = 1.2$) being significantly different from the control group ($M = 4.2$, $SD = 1.1$). The vivid narrative condition ($M = 3.6$, $SD = 1.4$) and the non-vivid narrative condition ($M = 3.6$, $SD = 1.4$) do not differ significantly from the other conditions. As a result, H2a is rejected.

H2b Hypothesis H2b: Vivid text narratives increase perceived benefits more than non-vivid text (non-)narratives showed insignificant results. A test of homogeneity of variances showed insignificant results ($p = .053$) which concluded that equal variances can be assumed. A one-way ANOVA showed that the results are insignificantly different between conditions ($F(3, 157) = .602$, $p = .615$). Post hoc testing showed insignificant differences between the four conditions. Vivid narrative condition ($M = 5.6$, $SD = .7$), non-vivid narrative condition ($M = 5.4$, $SD = .9$), non-narrative condition ($M = 5.4$, $SD = 1.1$) and control group ($M = 5.6$, $SD = .7$). As a result, H2b is rejected.

5.5 Behavioural intention

In this paragraph, the effects of (vivid) narratives on behavioural intention are discussed.

H3 Starting with hypothesis H3: “*Text narratives increase the behavioural intention to acquire pension information more than text non-narratives*”. A test of homogeneity of variance was insignificant ($p = .459$) which concludes that equal variances can be assumed. The results of the one-way ANOVA are insignificant ($F(2, 158) = 1.235, p = .294$). The narrative condition ($M = 3.4, SD = 1.3$), non-narrative condition ($M = 3.2, SD = 1.1$) and control group ($M = 3, SD = 1.2$) are not significantly different. H3 is rejected. Additionally, it is of importance to note that regardless of the assigned condition, respondents do not have the intention to search for pension information in the near future since all means are below the scale middle of 4.

H4 The last hypothesis is: “*Vivid text narratives increase the behavioural intention to acquire pension information more than non-vivid text (non-)narratives*”. Equal variances can be assumed due to a test of homogeneity of variances being insignificant ($p = .446$). One-way ANOVA showed insignificant results ($F(3, 157) = 1.187, p = .317$). As a result, the vivid narrative condition ($M = 3.2, SD = 1.2$), non-vivid narrative condition ($M = 3.5, SD = 1.4$), non-narrative condition ($M = 3.2, SD = 1.1$) and control group ($M = 3, SD = 1.2$) do not differ significantly. Therefore, H4 is rejected. Again, the results indicate that the overall intention to acquire pension information is low given that the means of the different conditions are all below the scale middle of 4.

5.5.1 Further analysis on behavioural intention

The statements about behavioural intention vary in degree of difficulty. For example, it is arguable much easier to visit www.mijnpensioenoverzicht.nl than it is to schedule a meeting with a financial advisor and talk about retirement. Therefore, it is of interest to analyse the different statements individually. When this is done, five significant results are found. However, the means of these results are all below the scale middle of four indicating that the actual intention is still relatively low.

First, a one-way ANOVA shows significant results for the statement: “*I plan on looking into my pension situation in the coming months*”. Levene’s test is insignificant ($p = .175$) which concludes that equal variances can be assumed. The results of the one-way ANOVA are significant ($F(2, 158) = 6.488, p = .002$). Post hoc testing shows that the narrative ($M = 3.7, SD = 1.8$) condition differs significantly from the control group ($M = 2.4, SD = 1.6$). The non-narrative condition ($M = 3.3, SD = 1.7$) is not significantly different from the different conditions. In this case, the narrative does lead to a significant increase in behavioural intention compared to the control group.

Second, when vividness is considered, the results are also significant. Levene's test is insignificant ($p = .175$). One-way ANOVA is significant ($F(3, 157) = 4.306, p = .006$). Tukey HSD post hoc testing shows that both the vivid narrative ($M = 3.7, SD = 1.8$) and non-vivid narrative ($M = 3.7, SD = 1.9$) differ significantly from the control group ($M = 2.4, SD = 1.6$). The non-narrative condition ($M = 3.3, SD = 1.7$) is not significantly different from the different conditions.

Third is the effect of narratives on the statement: "I plan on talking with a financial advisor about my pension situation". Levene's test was significant ($p = <.000$) therefore, Welch's ANOVA is used which is significant ($F(2, 158) = 5.626, p = .001$). In the case, the narrative ($M = 2.8, SD = 1.8$) and non-narrative ($M = 2.5, SD = 1.5$) condition differ significantly from the control group ($M = 1.8, SD = 1.1$).

Last, is the effect of vivid narratives on the statement: "I plan on talking with a financial advisor about my pension situation". Levene's test was significant ($p = .001$). Welch's ANOVA ($F(3, 157) = 9.386, p = .002$) proved significant. Games-Howell post hoc testing showed that both the vivid narrative ($M = 2.9, SD = 1.7$) and non-vivid narrative ($M = 2.8, SD = 1.8$) condition differed significantly from the control group ($M = 1.8, SD = 1.1$). The non-narrative condition ($M = 2.5, SD = 1.5$) was not significantly different from the other conditions.

"*I will read financial or pension literature to gain more insight on this topic*" is also significantly different between the four conditions ($F(3, 73) = 6.138, p = .001$). Post hoc testing shows that the non-vivid narrative condition is significantly more likely to read financial or pension literature than the vivid narrative condition and non-narrative condition are. Vivid narrative condition ($M = 2.6, SD = 1.7$), non-vivid narrative condition ($M = 4.4, SD = 2$), non-narrative condition ($M = 2.4, SD = 1.4$) and control group ($M = 4, SD = 1.9$).

5.6 Control variables

5.6.1 Perceived self-efficacy

Two control variables are used in the survey to try to explain the results of this study: how well respondents are informed about their pension situation on a scale of 1 through 10 and the number of times a respondent has looked into their pension situation in the last twelve months. The people that indicated that they thought that they scored a 5 or lower on their level of knowledge about their pension were marked as badly informed. In total, 82 respondents were marked as badly informed. Only the respondents that perceive themselves as badly informed

are analysed since these are the people that policymakers need to target. All cases met the requirement to be assumed equal in variances.

Controlling for badly informed for perceived self-efficacy using the narrative, non-narrative condition and control group the results are significant. Badly informed people who read the narrative ($M = 3.6, SD = 1.2$) or non-narrative ($M = 3.3, SD = 1.2$) have a significantly higher² perceived self-efficacy than the control group ($M = 4.4, SD = 1$) ($F(2, 79) = 5.256, p = .007$). When vividness is considered the results are also significant ($F(3, 78) = 3.964, p = .011$). The non-vivid ($M = 3.3, SD = 1.2$) and the non-narrative ($M = 3.3, SD = 1.2$) condition are significantly different from the control group ($M = 4.4, SD = 1$). The vivid narrative condition ($M = 3.8, SD = 1.1$) is not significantly different from the other conditions.

Next is perceived benefits which is not significant ($F(2, 79) = 1.874, p = .160$). Narrative condition ($M = 5.4, SD = .9$), non-narrative condition ($M = 5.2, SD = 1.2$) and control group ($M = 5.7, SD = .8$). When vividness is considered, the results are also insignificant ($F(3, 78) = 1.315, p = .244$). Vivid narrative condition ($M = 5.5, SD = .7$), non-vivid narrative condition ($M = 5.2, SD = 1.1$), non-narrative condition ($M = 5.2, SD = 1.2$) and control group ($M = 5.7, SD = .8$).

Last is behavioural intention. The results are both insignificant when vividness is not considered and when vividness is considered. When vividness is not considered ($F(2, 79) = .694, p = .503$), the narrative condition ($M = 3.1, SD = .9$) has a .01 higher mean than the non-narrative condition ($M = 3.1, SD = .9$) and a .3 higher mean than the control group ($M = 2.8, SD = 1.2$). When vividness is considered, the vivid narrative again has the highest mean ($M = 3.2, SD = 1.1$), followed by the non-narrative ($M = 3.1, SD = .9$), non-vivid narrative ($M = 3, SD = 1.4$) and control group ($M = 2.8, SD = 1.2$). This indicates that people who are badly informed are not influenced by being badly informed.

² Note that for perceived self-efficacy a lower mean indicates a higher perceived self-efficacy

5.7 Overview of results

Table 2: Overview of effects of the narrative on the core beliefs and behavioural intention compared to the other manipulations

Variable	Manipulation			p-value
	Narrative	Non-narrative	Control group	
	M (SD)	M (SD)	M (SD)	
Perceived self-efficacy	3.6 (1.4)	3.4 (1.2)	4.2 (1.1)	.013
Perceived benefits	5.5 (.8)	5.4 (1.1)	5.6 (.7)	.606
Behavioural intention	3.4 (1.3)	3.2 (1.1)	3 (1.2)	.294

Table 3: Overview of effects of the vivid narrative on the core beliefs and behavioural intention compared to the other manipulations

Variable	Manipulation				p-value
	Vivid narrative	Non-vivid	Non-narrative	Control group	
	M (SD)	M (SD)	M (SD)	M (SD)	
Perceived self-efficacy	3.6 (1.4)	3.6 (1.4)	3.4 (1.2)	4.2 (1.1)	.066
Perceived benefits	5.6 (.7)	5.4 (.9)	5.4 (1.1)	5.6 (.7)	.615
Behavioural intention	3.2 (1.2)	3.5 (1.4)	3.2 (1.1)	3.5 (1.2)	.317

Table 4: Overview of effects of the vivid narrative on the core beliefs and behavioural intention compared to the other manipulations when controlling for being badly informed

Variable	Manipulation			p-value
	Narrative	Non-narrative	Control group	
	M (SD)	M (SD)	M (SD)	
Perceived self-efficacy	3.6 (1.2)	3.2 (1.2)	4.4 (1)	.007
Perceived benefits	5.4 (.9)	5.2 (1.2)	5.7 (.8)	.160
Behavioural intention	3.1 (1.2)	3.1 (.9)	2.8 (1.2)	.503

Table 5: Overview of effects of the vivid narrative on the core beliefs and behavioural intention compared to the other manipulations when controlling for being badly informed

Variable	Manipulation				p-value
	Vivid narrative	Non-vivid	Non-narrative	Control group	
	M (SD)	M (SD)	M (SD)	M (SD)	
Perceived self-efficacy	3.8 (1.4)	3.3 (1.2)	3.3 (1.2)	4.3 (1)	.011
Perceived benefits	5.5 (.7)	5.2 (1.1)	5.2 (1.2)	5.7 (.8)	.244
Behavioural intention	3.2 (1.1)	3 (1.4)	3.1 (.9)	2.8 (1.2)	.673

6 General discussion

This study focuses on the role of text-based narratives and vivid text-based narratives on behavioural intention to search for pension information and perceived self-efficacy and perceived benefits of the Retirement Belief Model by Eberhardt, et al. (2017a). This is done to get a better understanding of what policymakers should do to successfully get people to start acquiring pension information since a lot of people do not have enough knowledge about their pension (Wijzer in geldzaken, 2013). It was anticipated that the use of narratives would increase the behavioural intention to acquire pension information and an increase of perceived self-efficacy and perceived benefits, two core beliefs of the Retirement Belief Model by Eberhardt, et al. (2017a). Additionally, the effects of vividness on these narratives are researched with the expectation that using vivid elements in a narrative would lead to an even greater increase in the behavioural intention to acquire pension information and a greater increase in perceived self-efficacy and perceived benefits. No evidence is found to support the hypotheses that are proposed in this paper. However, the results still aid in the current understanding of how to get people to start acquiring pension information.

First, both the narrative and the non-narrative were successful at making people realize that they should acquire pension information. The narrative was slightly more successful due to a higher mean; however, the results were not significantly different. It was expected that the respondents who read the non-narrative would find the text to contain more practical information than the respondents who read the narrative which was true. Additionally, the respondents who read the narrative thought that the narrative was more personal than the respondents who read the non-narrative which was also expected.

The results do not support H1a and H1b. The respondents that read the narrative did not have a significantly higher perceived self-efficacy than the respondents that read the non-narrative or that were part of the control group. Indicating that reading a narrative does not lead to an increase in people having the feeling that they have the capabilities to acquire pension information. However, the results do indicate that reading texts about pension, whether this is a narrative or not, leads to an increase in perceived self-efficacy when compared to the control group. Narratives do not aid in increasing perceived benefits. Compared to the non-narrative condition or the control group the same level of perceived benefits was observed when respondents had read the narrative. Indicating that narratives do not aid in increasing the benefits that people associated with searching for pension information

For hypotheses 2a and 2b, it became clear that vivid narratives do not aid in increasing perceived self-efficacy nor perceived benefits. A lower perceived self-efficacy was observed

when respondents read the vivid narrative. Contradicting what was thought at first and what has been shown in previous research where vividness led to better results compared to using no vividness. For perceived benefits, the vivid narrative did lead to the highest mean compared to the other three conditions. However, the results are not significantly different leading to the conclusion that vividness does not aid in increasing both perceived self-efficacy and perceived benefits.

Hypotheses 3 and 4 focus on the effects of narratives and vividness on the behavioural intention to acquire pension information. Both results were insignificant. When vividness is not considered, the narrative condition led to a higher behavioural intention compared to the non-narrative condition and the control group. When vividness is considered, it led to a lower behavioural intention than the non-vivid narrative. For all conditions, the mean was below the scale middle of four. Indicating that people have a low intention to acquire pension information. Therefore, a lot still needs to be done to get people to acquire pension information given the urgency of the topic.

When controlling for being badly informed, the narrative condition does not have a significant positive effect on perceived self-efficacy, perceived benefits nor behavioural intention. The same result is observed is vividness is considered.

To conclude, neither a narrative nor vividness led to a significant increase in perceived self-efficacy, perceived benefits or behavioural intention.

7 Conclusion

7.1 Managerial contributions

This study provides four implications for policymakers and marketers who focus on this subject.

First, the narrative showed to be ineffective at increasing perceived self-efficacy compared to both the non-narrative condition and the control group. Indicating that using narratives will not lead to increased perceived self-efficacy which will result in people not having the feeling that they can successfully acquire pension information after reading a narrative compared to when they have read a non-narrative. Therefore, narratives should not necessarily be used to promote perceived self-efficacy when considering using a narrative or a non-narrative. The results suggest that a non-narrative should lead to a greater increase in perceived self-efficacy. When controlling for being badly informed, the effect is the same with the non-narrative condition leading to a greater perceived self-efficacy. Indicating that using narratives is not the best way to increase perceived self-efficacy amongst badly informed people when trying to increase pension information acquisition.

Second, narratives showed to be ineffective at increasing perceived benefits compared to the non-narrative condition and the control group. The narrative condition did have a higher mean of 0.1. However, the control group had an even higher mean for perceived benefits. Indicating that narratives are not better at increasing perceived benefits than reading nothing at all is. When controlling for badly informed, a bigger difference between the narrative and control group is found. Again, indicating that narratives are not a good way to increase perceived benefits.

Third, behavioural intention is not significantly influenced through narratives. Contrary to perceived self-efficacy and perceived benefits, the people that read the narrative did have the highest level of behavioural intention compared to the non-narrative and control group. This indicates that narratives might be effective at increasing behavioural intention. However, when controlling for being badly informed it does show that the non-narrative leads to the same level of behavioural intention as the narrative does. Therefore, it is doubtful whether or not narratives are the best way to increase behavioural intention amongst these people. Since the badly informed people are the ones that policymakers want to target.

Fourth, it was hypothesized that vividness leads to a greater increase in perceived self-efficacy, perceived benefits, and behavioural intention compared to using no vivid elements. These hypotheses were rejected. In no case, did the vivid narrative lead to a significant positive

difference compared to the non-vivid narrative. Vividness did lead to an insignificant higher level of perceived benefits. When controlling for being badly informed, behavioural intention and perceived benefits had the highest insignificant mean.

7.2 Theoretical contributions

The results of this study are partly in line with previous research.

First, this study is partly in line with the study by Braun (2018) who showed that none but one core belief, (perceived severity) are influenced through narratives. This was proved correct in this paper. Perceived self-efficacy and perceived benefits are not significantly influenced through narratives. The narrative condition showed to be not more effective than the control group in the retirement context.

Second, the results of this study are in line with the study by De Graaf, et al. (2016) who stated that the type of narrative does not make a difference when looking at the level of persuasion in a narrative. This proved to be true. Perceived self-efficacy and perceived benefits are still not influenced through narratives even when using another type of narrative than the one that was used by Braun (2018).

Third, behavioural intention might be influenced through narratives. In this study, insignificant differences were found between the narrative condition, the non-narrative condition and the control group. However, the people that read the narrative did have the highest mean for behavioural intention. Leading to believe that narratives might have some positive effect on behavioural intention.

Fourth, the results show that vividness does not lead to a greater increase in perceived self-efficacy, perceived benefits, and behavioural intention as was hypothesized. In most cases, vividness led to a lower average compared to other conditions which indicate that vividness is not a good way to promote the acquisition of pension information. The results are not in line with previous research done by Dillard & Main (2013) who showed that vividness leads to an increase in knowledge on colorectal cancer and the intention to be screened for this disease. It is also not in line with previous research done by Ophir, et al. (2019) who showed that using vivid elements lead to a greater increase in the intention to quit smoking compared to using no vivid elements. In this case, using vivid elements did not lead to a significant difference in the intention to acquire pension information compared to using no vivid elements.

7.3 Limitations and further research

The following paragraph suggests limitations and further research on this study and topic.

First, further research needs to identify why vividness does not lead to an increase in the two core beliefs and on the behavioural intention to search for pension information. A previous study by Dillard & Main (2013) showed different results when using vividness as a component to increase the knowledge on colon cancer and the intention to be screened for this disease. This might be due to retirement being less imminent than other subjects in health-related topics. Additionally, it can be researched if there were too few vivid elements in the narrative. Previous research by Ophir, et al. (2019) showed that adding more vivid elements led to a greater increase in the intention to quit smoking.

Second, what still needs to be examined is if using narratives leads to a greater increase in the acquisition of pension information and the knowledge about one's pension over a longer period. Since narratives tend to immerse people more into a story than non-narratives, it is of interest to know if the narrative stays in people's head for a longer period and make people think. Ultimately leading to a greater increase in behavioural intention than a non-narrative.

Third, a limitation of this research is that the survey does not specifically ask respondents about their level of perceived vividness. It is assumed that the vivid narrative is vivid because the same vivid elements have been used in previous research (Keller & Block, 1997). Therefore, it cannot be determined whether or not the respondents perceived the narrative as vivid or not. Future research should therefore focus on implementing the three elements that lead to vividness (A) emotional interest, (B) concreteness and (C) proximity (Nisbett & Ross, 1980) in a survey.

Fourth, the manipulation that is used in this paper is a gain frame that emphasizes the positive effects that searching for pension information has on one's life. A gain frame was chosen because Braun (2018) showed that a gain frame might be more effective than a loss frame in the retirement setting. However, Braun used non-probability sampling meaning that the respondents were chosen. In this study, the respondents were random. Therefore, a loss frame might have led to different results. Additionally, Braun's respondents were on average older and had a higher average income than the respondents in this paper. Further research needs to examine if there is a difference between the effectiveness of a gain frame compared to a loss frame when a younger audience is involved instead of an older audience which was the case in Braun's study.

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9 Appendix

9.1 Braun's survey

Appendix D | English Questionnaire

Dear participant,

Thank you for taking part in this research. The research will take about 15 minutes of your time. Please read the instructions carefully and answer the questions to the best of your knowledge.

With this research we hope to be able to improve information about pensions. Your answers will be used purely for the purpose of this study. The information given will be treated confidentially and your participation is always anonymous.

If you have any further questions please contact Ann-Kristin Braun (a.braun@student.maastrichtuniversity.nl).

Thank you for your time and participation!

1. To start with the survey, we would need to know your gender:
→ **Measure:** (1) Male; (2) Female

Manipulation

Control group

Please click on Next to start with the questionnaire!

Or

You will first see a video about pension.

We ask you to watch this video before you answer the questions.

The video starts automatically.

Group 1: Non-narrative – gain frame

Group 2: Narrative – gain frame

Group 3: Non-narrative – loss frame

Group 4: Narrative – loss frame

Manipulation Check *(not shown to Control Group)*

Technical

2. Did you have technical problems while watching the video?
Measure: (1) Yes, please indicate:... ; (2) No

Framing

Please indicate to what extent you agree or disagree with the following statement regarding the video you just watched.

3. The video mostly focused on what you can gain if you inform yourself in time about your retirement.

4. The video mostly focused on what you can lose if you do not inform yourself in time about your retirement.
→ **Measure:** (1) Strongly disagree; (2) Disagree; (3) Somewhat disagree; (4) Neither agree nor disagree; (5) Somewhat agree; (6) Agree; (7) Strongly agree

Narrative vs. Non-narrative

5. The video mainly provided factual information.
6. The video mainly showed personal experience.
→ **Measure:** (1) Strongly disagree; (2) Disagree; (3) Somewhat disagree; (4) Neither agree nor disagree; (5) Somewhat agree; (6) Agree; (7) Strongly agree

Transportation *(not shown to Control Group)*

Please indicate to what extent you agree or disagree with the following statements about the video you have seen:

7. While I was watching the video I could easily picture the events in it taking place.
8. I was distracted by the events taking place around me. (R)
9. I was involved in the video while watching it.
10. After finishing the video I found it easy to put it out of my mind. (R)
11. I wanted to learn how the video ends.
12. I found myself thinking of ways the video could have turned out differently.
13. I found my mind wandering while watching the video. (R)
→ **Measure:** (1) Strongly disagree; (2) Disagree; (3) Somewhat disagree; (4) Neither agree nor disagree; (5) Somewhat agree; (6) Agree; (7) Strongly agree

14. Could you imagine the situation in the story?
→ **Measure:** (1) Not at all – (7) Very much

Identification *(not shown to Control Group)*

Please indicate to what extent you agree or disagree with the following statements.

15. My way of thinking is similar to the message in the video.
16. My life experience corresponds to the message in the video.
17. My general view of life corresponds to the message in the video.
18. When I looked at the story I thought “that could also happen to me”.
19. I was worried about the message in the video.
20. I found the message in the video interesting.
→ **Measure:** (1) Strongly disagree; (2) Disagree; (3) Somewhat disagree; (4) Neither agree nor disagree; (5) Somewhat agree; (6) Agree; (7) Strongly agree

Emotion *(not shown to Control Group)*

To what extent do you agree or disagree with the following statements:

21. Due to the video, feelings arose in me.
22. The video stirred emotions in me.

23. I found the video moving.

→ **Measure:** (1) Strongly disagree; (2) Disagree; (3) Somewhat disagree; (4) Neither agree nor disagree; (5) Somewhat agree; (6) Agree; (7) Strongly agree

To what extent did the video make you feel:

24. Happy

25. Strong

26. Active

27. Inspired

28. Sad

29. Nervous

30. Scared

31. Distressed

→ **Measure:** (1) Not at all – (7) Very large extent

Behavioral Intention

People have different intentions regarding the planning of their retirement. To what extent are the following statements on retirement planning applicable to you?

32. I plan on checking my pension in the upcoming months.

Mijnpensioenoverzicht.nl is a website that provides information about the accumulated pension of all your employers and you receive information on your projected retirement income.

33. I plan to go to an information session of my employer to acquire more information on my pension situation.

34. I plan to talk to friends and family members about my pension to get advice.

35. I plan to make an appointment with a financial advisor in the next months to discuss my pension situation.

36. I will consult financial or pension related literature to gain more insights and knowledge about the topics.

37. I will go to mijnpensioenoverzicht.nl to check my personal situation.

→ **Measure:** (1) Strongly disagree; (2) Disagree; (3) Somewhat disagree; (4) Neither agree, nor disagree (5) Somewhat agree; (6) Agree; (7) Strongly agree

Perceived benefits

People have different views on pension planning. Please indicate to what extent you agree or disagree with the following statements.

38. Seeking information about your pension is important.

39. Seeking information about your pension means taking on responsibility for your own financial situation.

40. Seeking information about your pension gives a feeling of certainty about your own financial situation.

41. By seeking information about my pension, I can reassure myself.

42. By seeking information about my pension, I can take care of my own financial situation.
43. It feels good to take responsibility for my own financial situation.
→ **Measure:** (1) Strongly disagree; (2) Disagree; (3) Somewhat disagree; (4) Neither agree nor disagree (5) Somewhat agree; (6) Agree; (7) Strongly agree

Perceived barriers

Please indicate how much you agree with the following statements.

44. The financial cost of seeking information about my pension is a barrier to me.
45. The time it costs to seek information about my pension is a barrier to me.
46. The efforts it costs to seek information about my pension are a barrier to me.
47. Seeking information would make me too concerned with my financial situation during retirement.
48. Just thinking about seeking information about my pension scares me.
→ **Measure:** (1) Strongly disagree; (2) Disagree; (3) Somewhat disagree; (4) Neither agree nor disagree (5) Somewhat agree; (6) Agree; (7) Strongly agree

Perceived self-efficacy

Please indicate how much you agree or disagree with the following statements.

49. Seeking information about my pension is difficult.
50. When seeking information about my pension, I would miss professional assistance.
51. If I would like to do something with the received information about my pension, I would need professional assistance.
→ **Measure:** (1) Strongly disagree; (2) Disagree; (3) Somewhat disagree; (4) Neither agree nor disagree (5) Somewhat agree; (6) Agree; (7) Strongly agree

Perceived susceptibility

52. In your opinion, what are the chances that you are not saving enough for retirement?
→ **Measure:** (1) Very low – (7) Very high
53. In your opinion, what are the chances that you are not saving enough for retirement compared to others of your age and gender?
→ **Measure:** (1) Much smaller – (7) Much larger

Perceived severity

54. In your opinion, how severe is it to not have sufficient financial means for your pension?
→ **Measure:** (1) Not severe at all – (7) Very severe

Control Variable

Credibility (*not shown to Control Group*)

55. The message in the video was...
→ **Measure:** (1) Very incredible; (2) Incredible; (3) Somewhat incredible; (4) Neither incredible nor credible; (5) Somewhat credible; (6) Credible; (7) Very credible

Exaggeration *(not shown to Control Group)*

56. The message about retirement seems to me exaggerated. (R)

→ **Measure:** (1) Strongly disagree; (2) Disagree; (3) Somewhat disagree; (4) Neither agree nor disagree; (5) Somewhat agree; (6) Agree; (7) Strongly agree

Financial Literacy

Now we have some financial questions. Please answer the following statements to your best knowledge.

57. Suppose you had 100€ in a savings account and the interest rate was 2% per year.

After 5 years, how much do you think you would have in the account if you left the money to grow?

→ **Measure:** (1) More than €102; (2) Exactly €102; (3) Less than €102; (4) Do not know

58. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?

→ **Measure:** (1) More than today; (2) Exactly the same; (3) Less than today; (4) Do not know

59. Please tell me whether this statement is true or false: “Buying a single company’s stock usually provides a safer return than a stock mutual fund.”

→ **Measure:** (1) True; (2) False; (3) Do not know

Risk taking

60. Are you in financial matters a person who is fully prepared to take risks or do you try to avoid risk taking?

→ **Measure:** (1) Not willing to take risk – (7) Fully prepared to take risk

Already informed

61. How well informed are you about the status of your retirement plan?

→ **Measure:** (1) No clue at all – (7) Completely informed

62. How often did you already search for information related to your pension in the past 12 months?

→ **Measure:** (1) Never; (2) Once or several times per year; (3) Monthly (4) Weekly; (5) Daily

63. Please answer the following question. How often do you check ‘mijnpensioenoverzicht.nl’ in the past 12 months?

→ **Measure:** (1) Never; (2) Less than 1x; (3) 1x; (4) 2x; (5) 3x; (6) More than 3x

Demographics

Finally, we would like to ask you some personal questions.

(Q64 – Q66 not asked in Qualtrics but received from Flycatcher afterwards)

64. What is your age?

→ **Measure:** Open answer

65. What is the highest level of education you have completed or received?

→ **Measure:** (1) No primary education; (2) LBO/VMBO / MBO1 / VBO; (3) MAVO/HAVO of VWO / VMBO (theoretisch of gemengd) / (M)ULO; (4) MBO 2, 3, 4 of MBO voor 1998; (5) HAVO of VWO (met diploma afgerond) / HBS / MMS; (6) HBO propedeuse; (7) HBO bachelor (of HBO voor 2002); (8) HBO master; (9) universitair propedeuse; (10) universitair bachelor/kandidaats; (11) universitair master/doctoraal/postdoctoraal

Would you please give your best guess?

66. What is the monthly gross income of your household? (This is the gross monthly salary of all members of the household, including holiday allowance and 13th month). If you do not know exactly, try to make the best possible estimate.

→ **Measure:** (1) Less than €1.000, (2) €1.000 – 1.999 (3) €2.000 – 2.999, (4) €3.000 – 3.999, (5) €4.000 – 4.999, (6) €5.000 – 5.999, (6) €6.000 or more, (7) I do not want to answer

67. How much (by percentage) does your income contribute to your entire household's income? Please enter an approximate percentage below.

Example: If you contribute €2,000 per month and the monthly income of your household is €4,000, then your contribution is 50%.

→ **Measure:** Text entry

68. Which statement best describes your current employment status?

→ **Measure:** (1) Working (paid employee), (2) Working (self-employed), (3) Not working, (4) Unable to work, (5) Retired; (6) Other, namely:....; (7) Prefer not to answer

69. How many years have you been working in total?

→ **Measure:** (1) Less than 2 years, (2) 2-4 years, (3) 5-7 years, (4) 8-10 years, (5) 11-13 years, (6) 14-16 years, (7) 17-19 years, (8) 20 or more

Thank you very much for participating in this survey! Please proceed to the last page for your response to be sent and recorded.

70. You have just completed a questionnaire about your pension. If you would like to receive more information about your accrued and predicted retirement income, you can click on the link below. The mijnpensioenoverzicht website opens then in a new window.

→ **Measure:** [Click here](#) to go to mijnpensioenoverzicht.nl.

9.2 Narratives and non-narrative

Vivid narrative (all vivid elements are in bold)

My name is Robin, and I am 22 years old. Recently I saw a tv-commercial which explained the importance of retirement planning. It became clear to me that it is **extremely** important to start

early, the sooner the better. You can **easily** find your current pension situation and find more information about your pension situation by going to the website www.mijnpensioenoverzicht.nl. I saw that the website shows you how much pension you have built up which was **shocking** to me as I did not expect it to be so little. Of course, I am still young, but retirement is never certain and who knows what the world will look like in 40 years. **Just imagine yourself in 40 years with little to no income to support yourself.** I know that everyone is busy with their studies or their work but just having a look around on a lazy Sunday could help you in the future. It may seem boring and complicated, but I expected to have enough income in 40 years, however I did not, and this worried me. How **awesome** would it be if I could get more certainty on my pension by taking the right steps now instead of in 20 years. This will surely save me a lot of sleepless nights. **Just imagine yourself during retirement with the same income as before retirement and being able to help your kids in tough times for example.** I am very happy that I took this step. It is easy, only took me a couple of minutes and saves me a lot of stress later on. I would advise everyone to do the same!

Mijn naam is Robin en ik ben 22 jaar oud. Recent zag ik een reclame over het belang van pensioenplanning. Het werd mij duidelijk dat het **ontzettend** belangrijk is om vroeg te beginnen, des te eerder des te beter. Je kan **gemakkelijk** informatie vinden over je huidige pensioeninformatie op www.mijnpensioenoverzicht.nl. Toen ik op de website keek, zag ik dat de website je laat zien hoeveel pensioen je hebt opgebouwd. Ik **schrok** hiervan, omdat ik had verwacht dat ik al veel meer pensioen had opgebouwd. Ik ben nog jong, maar pensioen is nooit een zekere zaak en wie weet hoe de wereld er over 40 jaar uitziet. **Beeld je eens in dat je over 40 jaar amper inkomen hebt om de rekeningen te betalen.** Iedereen is druk bezig met studeren of werken, maar slechts een luie zondag besteden, kan een verschil betekenen in de toekomst. Het lijkt misschien saai en ingewikkeld, maar ik verwachtte dat ik wel voldoende inkomen zou hebben over 40 jaar, maar dit bleek niet zo te zijn en dit baarde mij zorgen. Ik vind het zelf fijn dat ik nu al actie heb ondernomen in plaats van over 20 jaar als het wellicht te laat is. **Stel jezelf voor dat je tijdens je pensioen hetzelfde inkomen hebt als toen je nog werkte en dat je daardoor bijvoorbeeld je kinderen kan helpen als zij het financieel lastig hebben.** Dit gaat mij veel slapeloze nachten schelen en ik ben daarom blij dat ik dit heb gedaan. Het duurde maar een uurtje en zal mij veel stress schelen. Ik adviseer iedereen om hetzelfde te doen!

Non-vivid narrative

My name is Robin, and I am 22 years old. I recently saw a tv-commercial which explained the importance of retirement planning. It became clear to me that it is important to start early, the earlier the better. You can find your current pension situation and find more information about your pension situation on the website www.mijnpensioenoverzicht.nl. You can find your current pension situation and find more information about your pension situation on the website www.mijnpensioenoverzicht.nl. When I visited the website saw that the website shows you how much pension you have built up. I am still young, but retirement is never certain and who knows what the world will look like in 40 years. I know that everyone is busy with their studies or their work but just having a look around on a lazy Sunday could help you in the future. It may seem boring and complicated, but I expected to have enough income in 40 years, however I did not, and this worried me. It is nice that I have certainty now instead of in 20 years when it might be too late. This will surely save me a lot of sleepless nights. I am very happy that I took this step. It only took me an hour and saves me a lot of stress later on. I would advise everyone to do the same!

Mijn naam is Robin en ik ben 22 jaar oud. Recent zag ik een reclame over het belang van pensioenplanning. Het werd mij duidelijk dat het belangrijk is om vroeg te beginnen, des te eerder des te beter. Je kan informatie vinden over je huidige pensioeninformatie op www.mijnpensioenoverzicht.nl. Toen ik op de website keek, zag ik dat de website je laat zien hoeveel pensioen je hebt opgebouwd. Ik ben nog jong, maar pensioen is nooit een zekere zaak en wie weet hoe de wereld er over 40 jaar uitziet. Iedereen is druk bezig met studeren of werken, maar slechts een luie zondag besteden, kan een verschil betekenen in de toekomst. Het lijkt misschien saai en ingewikkeld, maar dat viel reuze mij. Het gaat mij veel slapeloze nachten schelen en ik ben daarom blij dat ik dit heb gedaan. Het duurde maar een uurtje en zal mij veel stress schelen. Ik adviseer iedereen om hetzelfde te doen!

Non-narrative

In a new tv-commercial, it is advised that you start with planning your retirement early. You can look at your current pension situation and find more information on www.mijnpensioenoverzicht.nl. Studies show that people pay little attention to their retirement because they do not have time, it is complicated or boring. People often think that they will receive enough income during retirement and that they can find the information in a later stage of their life. You can give yourself more certainty on your pension by taking action now. It does

not take much time to visit the website and calculate your retirement income. It is simple and gives certainty.

In een nieuwe reclame wordt het geadviseerd om te starten met pensioenplanning. Je kan je huidige pensioensituatie vinden op www.mijnpensioenoverzicht.nl. Studies laten zien dat mensen weinig aandacht besteden aan hun pensioen omdat ze zeggen dat ze geen tijd hebben of omdat ze denken dat het te ingewikkeld of saai is. Mensen denken vaak dat ze voldoende inkomen zullen hebben tijdens hun pensioen, maar dit is vaak niet het geval. Je kan jezelf meer zekerheid geven over je pensioen door nu actie te ondernemen en een kijkje te nemen op de website.

9.3 Demographics

Table 6: Gender demographics

Gender	N	Valid percent
Male	77	47.8
Female	81	50.3
Other	3	1.9

Table 7: Age demographics

Age group	N	Valid percent
18 to 24 years old	76	47.2
25 to 34 years old	17	10.6
35 to 44 years old	17	10.6
45 to 54 years old	23	14.3
55 to 64 years old	19	11.8
65 to 74 years old	4	2.5
75 years or older	2	1.2
I do not want to answer	3	1.9

Table 8: Education demographics

Highest level of education attended	N	Valid percent
Vmbo	5	3.1
Havo	9	5.6
Vwo	11	6.8
Mbo	19	11.8
Hbo	68	42.2
University	49	30.4

Table 9: Income demographics

Monthly income	N	Valid percent
Less than €1000	27	16.8
€1000 to €1999	28	17.4
€2000 to €2999	32	19.9
€3000 to €3999	17	10.6
€4000 to €4999	12	7.5
€5000 or more	20	12.4
Do not want to answer	25	15.5