A Motivational Approach to Hyperopia

The Impact of Future Self-Continuity and Fragile Self-Esteem

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Some consumers experience difficulties allowing themselves to indulge. This behavioural tendency, characterized as hyperopia, refers to the difficulty of deviating from what is perceived to be the virtuous and right thing to do, at the expense of long-term regret.

While research has shown that self-control can be used to resolve hyperopic decision-making conflicts, there is little evidence of the motives underlying hyperopic decision-making. The conceptualization of hyperopia depends on self-control paradigms. Therefore, hyperopia research is often concerned with managing self-control conflicts rather than understanding what drives consumers to hyperopic tendencies in the first place. The purpose of this research is to develop and test a motivational approach to explain hyperopia. This is carried out by examining the impact of self-esteem and future self-continuity on hyperopia among Finnish university students. A pilot study targeted at Finnish university students (n = 439) was conducted to find preliminary evidence of motivational antecedents of hyperopia. A mixed-method approach was employed, incorporating an extensive integrative literature review and a quantitative correlational research design.

Results suggest that an increased sense of future self-continuity negatively diminishes hyperopic decision-making tendencies. In contrast, results showed that people with fragile self-esteem tend to be more hyperopic. This research argues that hyperopia is motivated by the need to protect and enhance fragile self-esteem at the expense of truly farsighted decisions. Results indicate that hyperopic students' self-worth is relatively dependent on external domains of contingency, such as academic competence and others' approval, and therefore more likely to be influenced by introjected expectations rather than more intrinsically aligned preferences, decreasing autonomous self-regulation, and increasing the likelihood of hyperopic decision-making tendencies. Hence, hyperopic consumers tend to neglect truly farsighted decisions at the expense of introjected self-esteem goals, leading to controlled regulation, difficulties in justifying indulgence, and a lack of experienced pleasure.

Keywords: hyperopia, conflict-free self-regulation, identity motives, future self-continuity, fragile self-esteem, unstable self-esteem, contingent self-worth, self-worth contingent on others' approval, academically contingent self-worth, competition-contingent self-worth, financially contingent self-worth, true farsightedness (i.e., truly farsighted decision-making), core psychological needs, autonomy, self-determination

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1 Introduction

1.1 Research Background

Heinrich Bölls' satirical short story, "An Anecdote for Lowering Work Morale" revolves around a conversation between an eager tourist and a resting fisherman. The fisherman, having caught enough fish to last him for several days, has decided to take a day off and enjoy the sun on the deck of his boat. The tourist finds the fisherman relaxing in his boat and is unsettled by the apparent lack of work morale. He wakes him from his rest and strikes up a conversation. The tourist explains to the fisherman that there are ways for the fisherman to expand his business and accumulate wealth. He argues that expanding his business would be beneficial to the fisherman since it would provide the opportunity to finally take it easy and "… relax in the sun". The fisherman, perhaps a little bit confused, explains that he is already relaxing in the sun. He continues that his peace of mind is only disturbed by the persistent tourist. The tourist realizes the apparent happiness of the fisherman, becomes jealous, and leaves him alone. (Böll, 1977.) One underlying message of Böll's short anecdote is that one does not have to wait for the distant future to be able to enjoy oneself.

In an essay published by Helsingin Sanomat (28.4.2024), psychiatrist and writer Joel Haahtela (2024) criticizes the Western way of life, which is organized around excessive individualism and rationality, providing a misleading understanding of human possibilities and abilities to control life. Haahtela problematizes the Western idea of freedom and argues that a truly free person compromises his freedom to commit to the world and people around him. Moreover, Haahtela blames excessive individuality and rationality for giving rise to loneliness and social media addiction among others. (Helsingin Sanomat, 28.4.2024.)

The compulsive pursuit of freedom is present in consumer lifestyles. For example, Radenović and Mijatov (2019) explore marathon running as a form of escaping from everyday life and its problems. They propose that the fanatical pursuit of medals and imperative success is not primarily an enjoyable activity aimed at improving health, but rather a form of compulsive behaviour. The Financial Independence Retire Early (FIRE) lifestyle evolves around the idea of restricting the standard of living for the benefit of the distant future. FIRE practitioners plan to escape the rat race of capitalist society by using

disciplined saving, passive investing, and beneficial tax strategies to achieve early retirement and seek freedom and a more meaningful life in the distant future. (Grossan–Huffman, 2018; A. W. Khan & Pandey, 2023.) FIRE practitioners work hard at their jobs to eventually escape from the stressful work environment and capitalistic culture, seeking freedom from the obligations necessary for survival (A. W. Khan & Pandey, 2023). Rather than reflecting on their feeling of freedom in the moment, they envision the dream of freedom for the distant future. In doing so, they overlook the possibility of allowing themselves some enjoyment in the present, much like the tourist in Böll's (1977) satirical short story.

1.2 Research Problem and Purpose

Having difficulty allowing oneself to enjoy life's pleasures is referred to as hyperopia (Haws & Poynor, 2008; Kivetz & Simonson, 2002b). Alternatively, hyperopia can be characterized by an excessive focus on future benefits at the expense of the present, indicating excessive farsightedness and difficulties in diverging from "doing the right thing". In contrast to optimal decisions, hyperopic decisions are regretted in the long term. (Kivetz & Keinan, 2006.) For instance, a marathon runner might consistently choose exercising alone instead of spending time with friends and later regret it when realizing her feelings of loneliness in life. Similarly, a FIRE practitioner may choose to work long hours and neglect his desire to spend time with his kids to the extent that he afterwards regrets his choice. In the long term, this systematic hyperopic tendency might lead to increasingly regretting the missed joys of life, such as spending time with one's close ones.

Hyperopia is an anomaly of self-control failures (Loewenstein, 2018; Vosgerau et al., 2020). Self-control failures are violations of superordinate goals, which result in feelings of regret (Vosgerau et al., 2020). Most classical literature on self-control failures has focused on myopic self-control failures (Mehta et al., 2014). Myopia refers to short-sightedness, indicating present-biased decision-making behaviour. Myopic consumers tend to yield to short-sighted temptations and thus fail to stay true to their farsighted goals. (Kivetz & Keinan, 2006; Kivetz & Simonson, 2002b.) For example, excessively eating chocolate may lead to feelings of regret afterward. While myopia is perceived as the

classical self-control failure, some consumers violate their superordinate goals by being too hyperopic (Mehta et al., 2014).

Initially, hyperopia was characterized from the perspective of self-control, specifically myopic self-control failures (Kivetz & Keinan, 2006; Kivetz & Simonson, 2002b). However, myopic and hyperopic self-control failures differ from each other. Whereas myopic self-control failures are short-term decisions that do not align with long-term preferences (short-sightedness), hyperopic self-control failures are long-term decisions (excessive farsightedness) that do not align with optimal long-term preferences. Therefore, whereas myopic consumers misalign their short-sighted choices, hyperopic consumers misalign their farsighted choices. (e.g. Kivetz & Keinan, 2006.)

The construct of hyperopia is dependent on assumptions of Self-Control Theory. Two paradigms of self-control are especially present in hyperopia theory: the vice-virtue paradigm and the hedonic-utilitarian paradigm. Both paradigms have been used together to describe hyperopia (e.g. Kivetz & Keinan, 2006). The vice-virtue paradigm emphasizes the conflict between short-term desires and long-term preferences in decision-making (U. Khan et al., 2005). Correspondingly, hyperopia can be defined as the excessive choice of farsighted preferences over short-sighted desire (i.e., excessive farsightedness; e.g. Kivetz & Keinan, 2006). The hedonic-utilitarian paradigm emphasizes the conflict between hedonic and utilitarian preferences (Khan et al., 2005). Correspondingly, hyperopia can be defined as the difficulty of choosing hedonic luxuries over utilitarian necessities (Kivetz & Simonson, 2002b). Hyperopia has been characterized according to these paradigms and is, therefore, reliant on assumptions of Self-Control Theory.

Hyperopia research has been ambiguous on the relationship between self-control and hyperopia. In the early stages of hyperopia research, hyperopia was defined in relation to self-control (see Keinan & Kivetz, 2008; Kivetz & Keinan, 2006; Kivetz & Simonson, 2002b). Two different hypotheses were proposed regarding the relationship between self-control and hyperopia. First, self-control was demonstrated to serve as a means of preventing hyperopic decisions (Kivetz and Simonson 2002b). Second, hyperopia was argued to be equal to excessive self-control (i.e., excessive farsightedness, overcontrol; Keinan & Kivetz, 2008). Contradicting the second hypothesis, Haws and Poynor (2008) demonstrated that self-control and hyperopia are distinct constructs. Consequently,

hyperopia research has lacked a thorough understanding of what hyperopia is, if not excessive self-control.

While earlier research defined hyperopia primarily as excessive farsightedness (i.e., excessive self-control), the definition of self-control as an aversion to indulgence has become more prevalent since Haws and Poynor (2008) criticized the characterization of hyperopia as excessive self-control (see Haws & Poynor, 2008; Keinan & Kivetz, 2008; Kivetz & Keinan, 2006; Kivetz & Simonson, 2002a, 2002b; Loewenstein, 2018; Mehta et al., 2014; Pan et al., 2019; Vosgerau et al., 2020). The shift away from defining hyperopia as excessive farsightedness may be a response to the findings of Haws and Poynor (2008), which suggest that hyperopia is not equivalent to excessive self-control (i.e., excessive farsightedness). The loss of popularity in defining hyperopia as excessive farsightedness appears as an attempt to react to Haws and Poynor's findings, without really distinguishing hyperopia from self-control. Hence, hyperopia remains tied to self-control and its assumptions, without a thorough understanding of the differences between these constructs, increasing the ambiguity related to hyperopia and its characterization.

Multiple definitions of self-control exist. Many researchers regard self-regulation and self-control as synonymous (e.g., Baumeister, 2002; Tangney et al., 2004). However, other researchers have emphasized the need to distinguish between self-control and self-regulation (e.g. Fujita, 2011; Inzlicht et al., 2021; Vosgerau et al., 2020).

In hyperopia research, self-control has usually not been separately defined (e.g. Keinan & Kivetz, 2008; Kivetz & Keinan, 2006; Kivetz & Simonson, 2002b). The term, self-control, has been used with reference to conflicting preferences that exist in myopic and hyperopic decisions (e.g. Kivetz & Keinan, 2006; Kivetz & Simonson, 2002b; Mehta et al., 2014). These conflicts between preferences can be referred to as intrapersonal conflicts (i.e., self-control conflict, self-control problem; e.g. Inzlicht et al., 2021, 321; Thaler & Shefrin, 1981; Vosgerau et al., 2020). For example, a choice between a gym membership and an expensive, powerful computer involves an intrapersonal conflict. In hyperopia research, these intrapersonal conflicts are presented in alignment with the underlying self-control paradigms – the vice-virtue paradigm and the hedonic-utilitarian paradigm (e.g. Kivetz & Keinan, 2006). Thus, hyperopia research regards self-control relatively narrowly, as it is usually examined in the context of an intrapersonal conflict and one of the two paradigms (e.g.,Kivetz & Keinan, 2006).

The limited approach to self-control in hyperopia theory provides reason to distinguish between self-control and self-regulation. Whereas self-regulation refers to "various ways in which people modify their thoughts, feelings, and behaviours in the service of a personal goal", self-control is a specific form of self-regulation. It is the specific self-regulatory challenge that involves the process of resolving a conflict between conflicting motives. (Fujita, 2011; Inzlicht et al., 2021.) This distinction recognizes the role of self-control as a form of self-regulation that functions as a means to prevent hyperopic self-control failures, which is also recognized in hyperopia theory. Moreover, this definition supports the view of Haws and Poynor (2008) that self-control does not explain hyperopia.

Self-control research has been criticised for its limiting perspective, supporting the distinction between self-control and self-regulation. Werner and Milyavskaya (2019) argued that the focus of self-control research is often directed at the intrapersonal conflict rather than the source of the conflict, resulting in the underlying mechanisms of self-regulation remaining undiscovered. Similarly, Inzlicht et al. (2021) argued that Self-Control Theory has focused excessively, even exclusively, on self-control conflicts and their resolution. They suggested that research should put more emphasis on conflict-free forms of self-regulation, such as nurturing a sense of future self-continuity, in other words, a sense of continuity between current and future identities (Sedikides et al., 2023).

Given that previous research on hyperopia has mainly examined hyperopia from the perspective of self-control, this research takes an alternative approach by examining hyperopia from the perspective of conflict-free self-regulation. Self-regulation as an umbrella term involves both self-control and conflict-free self-regulation. However, conflict-free self-regulation is a form of self-regulation that is not directly concerned with conflicting decision-making motives. (Fujita, 2011; Inzlicht et al., 2021.) While the self-control perspective is primarily concerned with the resolution of intrapersonal conflicts, adopting the perspective of conflict-free self-regulation redirects the attention from the conflict itself. This enables the theoretical perspective on hyperopia to shift from solving hyperopic self-control conflicts to understanding motivational mechanisms that lead to hyperopic decision-making tendencies in the first place.

This research approaches conflict-free self-regulation from the perspective of Self-Determination Theory (SDT). According to the SDT, optimal psychological functioning

occurs when the core psychological needs of competence, autonomy, and relatedness are simultaneously satisfied, leading to high self-determination. (Deci & Ryan, 2000; Ryan & Deci, 2012.) The Organismic Integration Theory (OIT) describes different self-regulatory styles on the internalization continuum of external motivation that exhibit varied degrees of autonomy. Through the process of internalization, external motivation becomes more intrinsically aligned and thus, more autonomous. A key proposition of the OIT is that a more internalized form of self-regulation is related to higher self-determination and better self-regulatory functioning. Moreover, internalized forms of self-regulation reduce internal conflict and foster well-being. (Pelletier & Rocchi, 2023, 54-83; (Ryan & Deci, 2017, 179–215.)

The process of internalization can be regarded from the perspective of identity and conflict-free self-regulation. The internalization process provides a basis for developing intrinsically aligned identities that support the satisfaction of core psychological needs and thus contribute to an integrated sense of self-regulatory functioning. However, when the process of internalization becomes thwarted, identities are adopted that do not align with the need for autonomy. Consequently, the need for autonomy becomes frustrated, leading to difficulties in finding authentic meaning and maintaining a deep connection with others. Therefore, the internalization of an identity that is in alignment with the satisfaction of core psychological needs is important for psychic and self-regulatory functioning. (Deci & Ryan, 2000; Ryan & Deci, 2017b; 382–40.) Accordingly, in the context of this research, conflict-free self-regulation refers to the process of internalizing and integrating external motivation and identity towards a more intrinsically aligned form of self-regulatory functioning.

Based on hyperopia literature, farsightedness can be distinguished into two types based on the presence of regret: hyperopic farsightedness (i.e. excessive farsightedness) – decision-making that is aligned with a seemingly farsighted motive, but regretted retrospectively – and decision-making, that is aligned with a seemingly farsighted motive and not regretted retrospectively, and therefore, considered an optimal choice in the long term. In this research, a farsighted decision, that is not regretted retrospectively, is characterized as “truly farsighted” (or “true farsightedness”). Truly farsighted decisions do not involve retrospective regret, although some kind of intrapersonal conflict has occurred related to the decision (Haws & Poynor, 2008).

Drawing on SDT, this research argues that true farsightedness is self-determined. In other words, consumers make truly farsighted decisions when core psychological needs are satisfied. From the perspective of the OIT, this means that truly farsighted decisions take place when external motivation is aligned with intrinsic motives, satisfying the need for autonomy. Consequently, decision-making is less likely to become hyperopic. Hence, true farsightedness should differ from hyperopia in terms of whether core psychological needs are satisfied. Accordingly, one assumption in this research is that consumers maximize lifetime utility by maximizing the amount of truly farsighted decisions. In this research, maximum lifetime utility equals maximum lifetime well-being.

The Motivational Identity Construction Theory (MICT) is used to identify motives of identity construction that impact farsighted preferences. Identity motives can be defined as "pressures toward certain identity states and away from others, which guide the process of identity construction" (V. L. Vignoles et al., 2006, 309). In the context of farsighted decision-making, identity motives impact which identity elements are desired and feared in potential future selves. Thus, they influence the construction of future identities, which, in turn, are central motivators of self-regulatory behaviour in the context of farsighted decision-making. (V. L. Vignoles et al., 2008.) This research examines these identity motives as potential motivational factors underlying hyperopic decision-making.

This research is limited to two motives of identity construction, proposed by the MICT: self-continuity and self-esteem. Self-continuity refers to a continuous sense of self over time (Sedikides et al., 2023). People tend to desire identity elements of future selves that maintain a sense of self-continuity and fear identity elements that might threaten self-continuity. This research is limited to future self-continuity (FSC), which refers to the feeling of connection between one's current and potential future selves. (Sedikides et al., 2023.) FSC has been examined in the context of farsighted decision-making. For example, it has been found to predict farsighted decision-making, such as consumers' willingness to delay rewards to the future (Bartels & Rips, 2010; Ersner-Hershfield, Wimmer, et al., 2009). Thus, FSC is an indicator of farsighted decision-making.

Self-esteem refers to an interrelated sense of feeling competent (self-competence) and worthy (self-worth; Branden, 1969; Mruk, 2013, 18–21). People tend to desire identity elements in future selves that increase self-esteem and fear identity elements that decrease self-esteem (V. L. Vignoles et al., 2008). In this research, the identity motive of self-

esteem is examined from the perspective of whether it is fragile or secure. Fragile self-esteem occurs when self-worth is contingent, or self-esteem is unstable. Contingent self-worth means that one's feeling of self-worth is dependent on external demands (contingent self-worth; Kernis, 2003). For example, someone's feelings of self-worth might be dependent on receiving approval from others (Crocker, Luhtanen et al., 2003). Self-esteem is unstable when it fluctuates over time. If self-esteem is fragile, self-esteem fluctuates when contingencies of self-worth are not met (Kernis, 2003).

Although self-esteem is a widely accepted motive of identity construction, some researchers argue that it is an unhealthy identity motive (Soenens & Vansteenkiste, 2011). Crocker & Park (2004) argued that the pursuit of self-esteem is driven by a need to compensate for a fragile sense of self-esteem. In other words, people with fragile self-esteem, as opposed to people with secure self-esteem, are motivated to pursue self-esteem. Therefore, this thesis approaches the identity motive of self-esteem from the perspective of whether self-esteem is fragile or secure.

In summary, this research provides an integrative conceptual approach that combines perspectives from Motivational Identity Construction Theory (MICT), Self-Determination Theory (SDT), and Self-Control Theory (SCT; see Figure 1). SCT provides a further understanding of the underlying assumptions of the construct of hyperopia. The MICT provides a perspective on the motivational antecedents of future identity construction that influence farsighted preferences (V. L. Vignoles et al., 2008). The identity motives of self-esteem and future self-continuity (FSC), which underlie the identity construction of future selves, are examined from the perspective of truly farsighted decision-making, a perspective based on SDT. The motive for self-esteem is examined from the perspective of the extent to which self-esteem is fragile (contingent self-worth, unstable self-esteem). Together, these theoretical perspectives provide the basis for an empirically testable conceptual model.

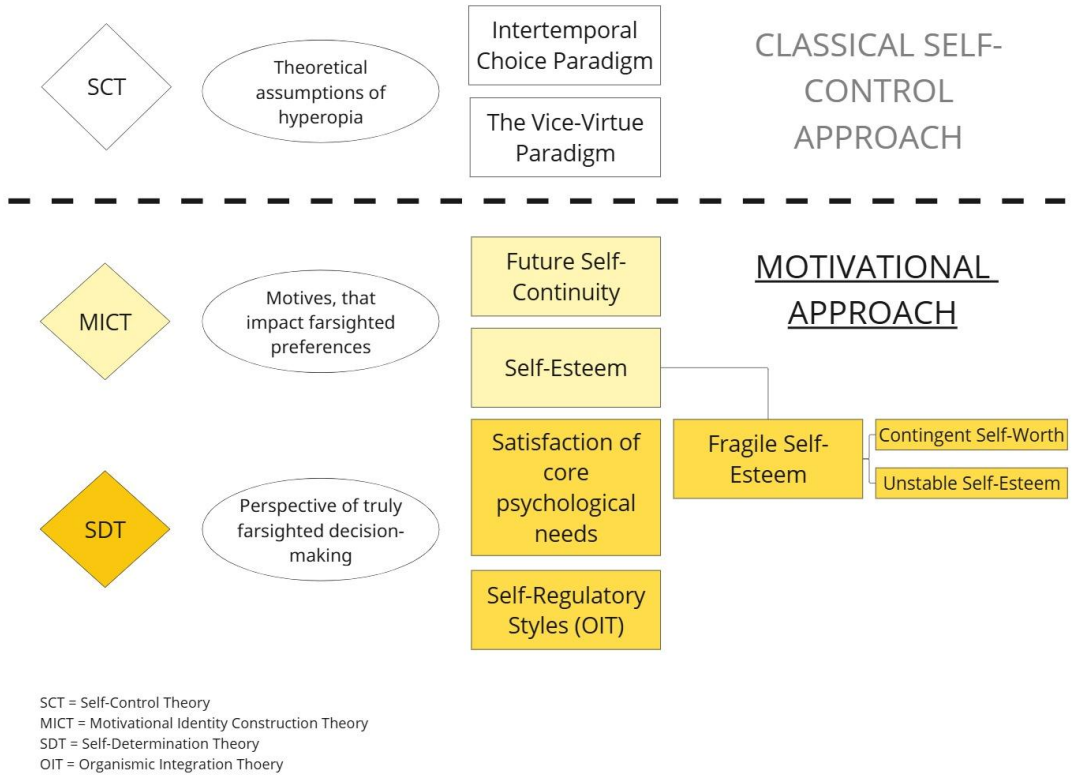

Figure 1. Conceptual approach and key constructs

The purpose of this research is to develop and test a motivational approach to explain hyperopia. This is carried out by examining the impact of fragile self-esteem and future self-continuity on hyperopia among Finnish university students. The research was executed as an extended literature review together with a quantitative correlational pilot study to get primary evidence for the theoretical research hypotheses. Data was gathered through a questionnaire directed to students at seven faculties of the University of Turku. The target population provides an opportunity to test preliminary assumptions in a relatively heterogeneous group of people, where lifestyles are relatively similar and observable, and decision-making has farsighted consequences. University students have been demonstrated to make hyperopic decisions in trivial situations (Kivetz & Keinan, 2006).

The research questions are the following:

1. What kind of theoretical approach can be applied to provide a motivational perspective on hyperopia within the context of conflict-free self-regulation?
2. How does future self-continuity relate to hyperopia?
3. How does fragile self-esteem relate to hyperopia?

The significance of this research lies in the application of a new theoretical perspective to the concept of hyperopia. The research approaches hyperopia from a problematization perspective. Existing challenges in hyperopia research are identified, and an alternative approach to addressing these issues is provided, contributing to the theoretical discourse in hyperopia and self-control research. The new perspective focuses on addressing self-regulatory and motivational issues of trait hyperopia, rather than focusing on hyperopia solely in the context of decision-making conflicts and self-control. From a practical perspective, the research contributes to understanding hyperopic consumer tendencies and lifestyles from a more motivational and self-regulatory point of view.

This research has the following delimitations, guiding the scope of this research. Identity motives are limited to self-esteem and self-continuity. The identity motive of self-continuity is limited to future self-continuity (FSC). The identity motive of self-esteem is examined from the perspective of fragile self-esteem, considering that people with fragile self-esteem tend to pursue self-esteem goals (Crocker & Park, 2004). Hyperopia is examined as a relatively constant trait that reflects decisional tendencies, rather than in the direct context of decision-making. Self-worth contingency is assumed to be dependent on specific domains, such as competition or academic success (Crocker & Luhtanen, 2003). Therefore, the relationship between hyperopia is examined in relation to specific domains, rather than overall self-worth contingency.

The research involves some limitations. The literature view was integrative and combined multiple theoretical streams. The combination of theoretical perspectives may come at the expense of rigour. (Snyder, 2019.) For example, Perspectives of the SDT and the MICT are combined without a deep-rooted comparison of assumptions. Some limitations are related to data gathering procedures. Sampling procedures have likely introduced some selection and non-response bias. Due to the heterogeneity of the target frame, the results of the empirical pilot study are generalised to represent Finnish university students.

However, only students at the University of Turku are included in the target frame. Therefore, the representativeness of results lacks accuracy.

The research was conducted with the help of artificial intelligence software to improve language, find sources and brainstorm. Chatgpt, Microsoft Copilot and Gemini were used for brainstorming purposes, such as when planning the structure of this research, brainstorming methodological choices, formulating headings and research questions, and rephrasing sentences. Grammarly and DeepL Write were used to improve language. Keenious and Semantic Scholar were used to find sources.

1.3 Research Structure

This research consists of 7 chapters. Chapter 1 includes the study background, the research problematization, the research purpose, a short introduction of the methodology, which will be further expanded in Chapter 5, the research questions, the significance of the study, limitations, and delimitations.

Chapter 2 presents the main constructs and theoretical perspectives related to this research. Section 2.1 explores the construct of hyperopia. Section 2.2 examines the meaning of self and identity in the context of applied theories. Section 2.3 examines the key self-related constructs, such as future self-continuity, self-esteem, fragile self-esteem, contingent self-worth, and unstable self-esteem.

Chapter 3 explores the theoretical perspectives relevant to this research. Section 3.1 is an introduction to the chapter. Section 3.2 introduces the underlying assumptions of hyperopia, which are rooted in Self-Control Theory. Section 3.3 presents the Motivational Identity Construction Theory (MICT) and the identity needs of self-esteem and future self-continuity in shaping farsighted preferences. Section 3.4 presents the Self-Determination Theory (SDT) and the Organismic Integration Theory (OIT) with relevance to self-regulation, motivation and identity.

Chapter 4 examines the nature of hyperopia in the context of self-regulation and motivation, specifically from the perspectives of the identity motives of self-esteem and future self-continuity. Section 4.1 distinguishes between hyperopia and true farsightedness. Section 4.2 examines future self-continuity as a potential predictor of

hyperopia. Section 4.3 examines fragile self-esteem as a potential predictor of hyperopia. Section 4.4 presents a theoretical framework that is used as the basis of the quantitative part of this research.

Chapter 5 describes the methodological approach and research design of this research and presents the target population, sample, sampling procedures, questionnaire design, questionnaire instrumentation, and data analysis procedures.

Chapter 6 presents the results of the data analysis. The results of the exploratory factor analysis are presented in section 6.1. The results of hypothesis 1 regarding the relationship between future self-continuity and hyperopia are presented in section 6.2. The results of hypothesis 2 on the relationship between fragile self-esteem and hyperopia are presented in section 6.3.

Chapter 7 summarizes the research, discusses the findings with suggestions for further research and presents some concluding remarks.

2 Introduction to Key Constructs

2.1 Hyperopia

Hyperopia, i.e. aversion towards indulgence (Haws & Poynor, 2008; Kivetz & Simonson, 2002b), was first introduced as a theory in a pioneering study by Kivetz and Simonson (2002b). Contrary to earlier beliefs, the researchers found that some consumers experience difficulties choosing luxuries over necessities and need to exercise self-control to allow themselves to indulge. They described this form of self-control as "overcontrol" and "the opposite form of self-control". Whereas myopic consumers had been known to exert self-control to prevent yielding to hedonic temptations (myopia), now hyperopic consumers were found to use self-control strategies to diminish hyperopic tendencies. Thus, the research argued that hyperopic consumers used self-control to allow themselves to indulge. Consumers exercised self-control by using strategies to pre-commit to hedonic indulgence. For example, given a choice between cash and hedonic gift rewards, some participants chose gift cards to avoid the temptation to reallocate their reward to more necessary uses at a later point in time.

Following Kivetz and Simonson (2002b), Kivetz and Keinan (2006) introduced hyperopia more broadly as excessive farsightedness, referring to the tendency to choose virtuous options over vice options and the difficulty of deviating from virtuous choices that are considered the right and responsible things to do. Similarly to myopic self-control failures, the difference between optimal self-control and hyperopia was assessed based on negative affect. Kivetz and Keinan argued that while myopic behaviour can lead to strong feelings of guilt, making a farsighted choice can lead to regret and wistful feelings of having missed out on the pleasures of life. For example, attending a party rather than working could lead to feelings of guilt, whereas choosing work over partying could lead to feelings of missing out on the experience.

Haws and Poynor (2008) challenged earlier definitions of hyperopia which viewed hyperopia as a form of excessive self-control. They argued that there is lacking evidence confirming the relationship between excessively high self-control and hyperopia. By redefining hyperopia as a trait rather than a description of behaviour, and developing a measure of trait hyperopia, they showed, that hyperopia and self-control are separate constructs, with a slightly negative correlation ($r = -0.10$). Haws and Poynor argued that

although both hyperopic and high self-control consumers tend to make farsighted choices, such as choosing a fruit salad over a cake if the farsighted goal is weight loss, high self-control consumers are able to self-regulate their behaviour so that they feel less regret about missing out, compared to hyperopic consumers.

Based on earlier findings, Haws and Poynor (2008) proposed three major elements of hyperopia. First, hyperopia reduces consumers' immediate tendency to indulge. Thus, hyperopic consumers are less likely to indulge, because they reject short-term indulgence to avoid compromising long-term goals. At the same time, they do not properly consider the potential benefits of indulgence. Keinan and Kivetz (2008, 676–677) found that consumers who consider the long-term possibility of regretting a virtuous decision are more likely to anticipate regret and thus, more likely to switch their preferences towards a more indulgent choice. They argued that anticipating future regret motivates consumers to forestall hyperopic decisions. Second, hyperopic consumers recognize their difficulties with indulgence and should therefore be able to report them (Kivetz & Simonson 2002b). This implies, that hyperopic consumers are to some extent aware of their intrapersonal conflict between preferences related to a decision. Third, hyperopia is distinguished from simple farsightedness by a retrospective feeling of regret or a sense of missing out on life (Kivetz & Keinan 2006).

Kivetz and Keinan (2006) argued that although hyperopic decisions may initially seem preferable, they often lead to increasing regret over time. They suggested that the affective consequences of hyperopia increase over time, whereas the opposite is true for myopia. Drawing on Kahneman (1995), Kivetz and Keinan (2006) argued that whereas the guilt often experienced as a result of myopic choices is an intense but short-lived emotion, the sense of missing out on life's pleasures is less intense but increases over time. In other words, while guilt is a hot and short-lived emotion, the sense of missing out is a cold emotion that builds up over time. Therefore, Kivetz and Keinan proposed that in the long term, consumers tend to experience stronger affective feelings from hyperopic choices than from myopic choices, because the guilt from myopic choices tends to decrease over time and the feeling of having missed out on life's pleasures tends to increase over time. However, in the short term, feelings of guilt are more intense and may therefore be more salient in anticipation of a choice.

The degree of hyperopia is moderated by regret anticipation and self-focus (Keinan & Kivetz, 2008; Mehta et al., 2014). Based on five empirical studies, Keinan and Kivetz (2008) found that consumers who consider the long-term possibility of regretting a virtuous decision are more likely to anticipate regret and thus more likely to shift their preferences towards a more indulgent choice. They argued that anticipating future regret motivates consumers to indulge and make choices that are more satisfying in the long run. Furthermore, Mehta et al. (2014) found that focusing on oneself increases the likelihood of being aware of one's consumption patterns. Consequently, they argued, that hyperopic consumers who recognise their hyperopic tendency by focusing on themselves when the opportunity to consume arises are more likely to choose the indulgent option.

Kivetz and Simonson (2002) argued that hyperopia can be domain-specific. For example, someone might be hyperopic specifically in the domain of career choices and prioritise work at the cost of well-being. Similarly, Keinan and Kivetz (2008) emphasized, that hyperopia and myopia can coexist within an individual. For example, someone may have myopic tendencies towards social media, but hyperopic tendencies towards decisions related to physical appearance. As a trait, hyperopia is present in all individuals to some degree. It reflects the overall hyperopic tendencies within an individual. (Haws & Poynor, 2008.)

Hyperopia can easily be confused with frugality. However, (Pan et al., 2019) argued that while the effects of hyperopia and frugality on consumers' monthly spending are similar, the constructs differ in terms of their motivational drivers. They found that both hyperopic and frugal consumers spend a smaller proportion of their monthly income on living and consumption expenses than average, with the reduction in spending by frugal and hyperopic consumers being at similar levels. However, Pan et al. found that the motivational drivers of frugal and hyperopic consumers were different. Comparing the saving and spending motivations of hyperopic and frugal consumers, they found that hyperopic consumers reduce their monthly spending because they lack the motivation to spend, whereas frugal consumers reduce their spending because they have the motivation to save. This finding highlights the importance of understanding the motives behind hyperopic tendencies.

2.2 Identity and Self within Applied Theories

2.2.1 Multiple Definitions of Self

The presence of three broad theories – the Self-Control Theory (SCT), the Motivation Identity Construction Theory (MICT), and the Self-Determination Theory (SDT) – in this research underscores the importance of distinguishing between distinct characterizations of self. The meaning of self often varies across theories, which can lead to misinterpretations (Leary & Tangney, 2012, 4–5; Schwartz et al., 2011). Therefore, drawing on Leary and Tangney (2012, 4–5), four categorical definitions of self-relevant to this study are discussed: the self as personality, the self as an experiencing subject, the self as beliefs about oneself, and the self as an executive function.

The perspective of self as personality characterizes the self as synonymous with personality. Personality refers to the sum of aspects that make a person psychologically distinct. (Leary & Tangney 2012, 4–5.) This definition of the self is typical to theories of self-actualization. For example, Maslow (1954, as cited by Leary & Tangney, 2012, 4–5) viewed self-actualization as the actualization and integration of an individual's self, and thereby the integration of personality.

The self as an experiencing subject and the self as beliefs about oneself are two intertwined aspects of the self (James 1890, as cited in Leary & Tangney, 2012, 5). The self as an experiencing subject represents the self as a subject of experience (Leary & Tangney, 2012, 5). James (1890, 364) referred to it as the vehicle of knowing, or the ego, thought, mind, consciousness, reason, feeling, etc. – all that "must know". It is the inner psychological core that serves as the subject of a person's experience (Leary & Tangney, 2012, 5). The self as beliefs about oneself refers to the "perceptions, thoughts and feelings about oneself – the different answers, that a person might give to questions such as 'Who am I?'" This self is made up of beliefs about oneself. (Leary & Tangney, 2012, 5.)

The self as an executive function refers to the self as a decision-maker, doer, and regulator (Baumeister & Vohs, 2012; Leary & Tangney, 2012, 4–5). It filters information, selects responses from the available options, and takes action (Baumeister & Vohs, 2012). Processes of the self as an executive function are central to theories of self-control and self-regulation (Baumeister & Vohs, 2012; Leary & Tangney, 2012, 4–5). For example, the executive function is active when making consumer decisions.

2.2.2 Personal Identity

In this research, the construction of identity is examined as a motive for farsighted self-regulation (Berkman et al., 2017; V. L. Vignoles et al., 2008). Identity is limited to personal identity. Self and identity are sometimes used interchangeably (Oyserman et al., 2012, 69–75). To clarify the relationship between self and identity in this research, this section (2.2.2) explores the meaning of personal identity in relation to the presented perspectives of self.

The core issue of identity is embedded in the question: “Who am I?”. The question can be directed to an individual or multiple individuals. (Schwartz et al., 2011, 2.) For example, students enrolled in the same educational institution share a common element of identity. Identity can be defined by the subject in question, by an external observer, or interactively (Schwartz et al., 2011, 2). For example, a man may be identified as a loving father by his children but as a jerk by his former spouse.

Identity can also be understood in terms of sameness, where it is defined as a state of being identical. Sameness can be classified as either qualitative or quantitative. Two entities are qualitatively identical if they possess the same characteristics; they are quantitatively identical if they are the same object. Thus, quantitative sameness does not equal qualitative sameness. (Parfit 1984, 201–202.) For example, two qualitatively identical tablespoons are not quantitatively the same. Changes in qualitative identity destroy quantitative identity (Parfit, 1984, 201–202). When a tablespoon undergoes a qualitative change, it is no longer quantitatively the same as before the qualitative change.

In the context of this research, identity is mainly considered from the perspective of personal identity, rather than relational or collective identity (e.g. Bartels & Rips, 2010; Parfit, 1971). Personal identity can be defined as “elements of self-definition at the level of the individual person” (Schwartz et al., 2011, 3) and can be based for example on goals, values, and beliefs (Bartels & Rips, 2010; Marcia, 1966; Waterman, 1999 as cited in Schwartz et al., 2011, 3), as well as personality, temperament, and ideals among others (Bartels & Rips, 2010).

James (1890, 224–401) connected personal identity with two types of selves. He argued that the sense of personal identity arises from the perceived sameness attributed to things that are reflected upon. Based on the idea that the self is both a thinker ("I") and the object

of thought ("Me"), he suggested that personal identity is formed through the dynamic interplay between the self as an experiencing subject ("I") and the self as beliefs about oneself ("Me"). James explained that, in a broader sense, the "Me" consists of the aggregate of known objects – such as experiences, memories, and roles – and is continuously reshaped by the "I." The "I" reflects upon, selects, and integrates these objects of thought, shaping them into a coherent and continuous sense of self. Thus, James argued, that the "Me" is a dynamic combination of objects that are reorganized based on what is perceived as important or continuous over time. He suggested that the sense of personal identity arises in the interplay of the two selves. The sense of personal identity, he proposed, comes from the "perception of sameness among phenomena – – a conclusion grounded either on the resemblance in a fundamental respect, or in the continuity before the mind, of the phenomena compared" (p. 334).

2.2.3 Personal Identity and Self Across Applied Theories

The conceptualization of self and identity differs within theoretical approaches applied in this research. These differences are addressed in this section (2.2.3). The relevance of distinct conceptualizations to this research is further clarified in section 4.3.3.

Self-Determination Theory (SDT) tends to characterize the self as personality and an executive function. For instance, Soenens and Vansteenkiste (2011, 382) defined the self as an "innate and natural process that guides one toward more integrated and optimal functioning". Ryan and Deci (2017, 51–53) referred to this self specifically as the self as a process, indicating the process of psychic integration. Within the context of self-regulation, the self can be seen as an executive function. For example, according to the Organismic Integration Theory – a sub-theory of the SDT – self-regulatory styles determine how behaviour is regulated. However, the self as an executive function is not explicitly referred to as the self. Rather, the experience of the self is examined in relation to the locus of control (Deci & Ryan, 2000; Ryan & Deci, 2017b).

Self-Determination Theory (SDT) regards identity as distinct from the self (Soenens & Vansteenkiste, 2011). From this perspective, the self is an experiencing subject, because it is the core of experience, whereas identity represents the self as beliefs about oneself.

Therefore, identity is regarded as an assessment of oneself and is distinct from the self. (Ryan and Deci 2017, 51–53; Soenens & Vansteenkiste, 2011.)

The Motivated Identity Construction Theory (MICT) regards the self and identity as relatively synonymous. Identity is primarily perceived as "all aspects of the image of oneself – as represented in cognition, emotion, and discourse". Thus, identity is presented as beliefs about oneself that are actively reconstructed throughout life (V. L. Vignoles, 2011, 404–405). However, according to the MICT, the subjective experience of identity depends on whether identity motives are satisfied (Batory-Ginda, 2022). Hence, according to the MICT identity can be characterized as a combination of the self as an experiencing subject and the self as beliefs about oneself, and thus, personal identity as defined by James (1890, 224–401).

Hyperopia theory tends to view the self as an executive agent. The emphasis of hyperopia research is on the anticipation and prevention of hyperopic choices in the context of decision-making and self-control (e.g. Haws & Poynor, 2008; Keinan & Kivetz, 2008; Kivetz & Simonson, 2002b). Hence, the focus of the construct is primarily on the executive functions of the self. Identity is not specifically mentioned in hyperopia theory.

2.3 Key Constructs Related to Identity and Self

2.3.1 Future Self-Continuity

In the most basic sense, self-continuity can be defined as the subjective perception of a connection between one's current, past, and future selves (Sedikides et al., 2023). The recollection of oneself singing in a karaoke bar during a vacation in Costa Rica the previous spring represents the experience of a past self that is connected through memory to the current self. Similarly, beliefs, desires, and intentions about the future self contribute to the formation of connectedness to the future self. (Parfit, 1984, 204–206.) For example, the image of oneself as a loving and wise grandparent in the future connects the future self to the current self. Hence, self-continuity exists between the current self and the past self, as well as the current self and the future self (Sedikides et al., 2023).

Self-continuity involves the chronological integration of essential features of the self over time (Sedikides et al., 2023). According to the philosopher Parfit (1984, 204–206)

psychological continuity refers to the continued existence of a mental entity or soul, similar to the physical continuity of the human body. He suggested that it consists of overlapping chains of connectedness to selves at different points in time. James (1890, 331–335) argued that self-continuity is the perceived sameness with current and past selves, and thus an extension of personal identity involving past and future elements of identity. Furthermore, he argued that the sense of personal identity is dependent on the sense of sameness and continuity. The sense of personal identity disappears when sameness and continuity are not felt. In other words, continuity is formed of elements of sameness that are maintained over time (Sedikides et al., 2023). Hence, future self-continuity is an essential element of personal identity.

Future self-continuity can be further examined following the assumption that personal identity is established as an interplay between the experiencing self and the self as beliefs about oneself, as suggested by James (1890, 224–401). The concept of the future self can be defined as a set of beliefs about oneself at a future point in time (e.g., Bartels & Rips, 2010). In other words, the future self is a present belief about who the future self might be. Although the future self is an object of belief, it is not the subject of experience. One cannot experience the future self in and of itself; rather, the future self is experienced as part of the present self. The present self identifies with elements of the future self to a certain degree of continuity. Consequently, the degree of continuity implies how much the current experiencing self identifies with the future self. Similarly, it indicates the degree of continuity of elements of current personal identity over time. In a broader sense, the future self can be regarded as an object of identification that is comparable to a close other person (James, 1890, 224–401; Mitchell et al., 2011). As such, it can be considered integral to personal identity (James, 1890, 224–401).

Several practical approaches to future self-continuity have been used. Bartels and Rips (2010) referred to future self-continuity as the extent to which individuals perceive a connection between their present selves and future selves in terms of personality, beliefs, values, goals, ambitions, temperament, likes, dislikes, and ideals. Ersner-Hershfield, Garton, et al. (2009) conducted a “Me/Not Me” task, in which participants endorsed trait words that they perceived matched with themselves. Individuals with higher future self-continuity had more trait words that matched both their current and future selves. Ersner-Hershfield (2011) focused on the psychological attributes that contribute to future self-continuity. He identified three elements that contribute to future self-continuity:

similarity, vividness, and affect. Similarity refers to how similar the future self feels to the current self. Vividness describes how clearly one can imagine the future self. Affect refers to the positive or negative attitudes one has towards the future self. This view was later adopted by Sokol and Serper (2019), who introduced a measure of future self-continuity constructed from these three factors.

A common approach to measuring future self-continuity has been based on the assumption, that people are intuitively inclined to recognize what constitutes the self and the future self. Moreover, the ability to intuitively judge one's relationship to the current self and future selves has been a common assumption in self-report questionnaires (e.g. Bartels & Rips, 2010; Ersner-Hershfield, Garton, et al., 2009; Sokol & Serper, 2020). For example, Ersner-Hershfield, Garton, et al. (2009) asked participants to select a circle, that best represents their perceived similarity and continuity with their future self in 10 years. Participants were also asked how much they cared for and liked their future self.

High future self-continuity does not mean that personal identity does not change over time. Instead, one can be connected to the future self even though it changes rapidly over time. Thus, it is not the change in personal identity but the sense of being the same person as the future self that provides continuity. (Ersner-Hershfield, 2011.) Change can be perceived as continuous, for example, as part of one's life story (V. L. Vignoles et al., 2008).

2.3.2 Self-esteem

The topic of self-esteem is one of the most extensively researched in the field of social sciences (Scheff & Fearon Jr, 2004). To illustrate, an exhaustive search of the Scopus database reveals over 33,000 documents that contain the keyword "self-esteem" (Scopus, 11.4.2024). The importance of self-esteem is underscored by the notion that self-esteem seems to be one of the few aspects of human life that transcends the entire spectrum of human behaviour (Mruk, 2013, 15). Consequently, it has an impact on a number of different fields of research. It affects behaviour in a number of specific contexts, as well as on a more general level (Rosenberg et al., 1995). The relationship between self-esteem and various aspects of psychological functioning, mental well-being, mental disorders,

physical health, and competence has been demonstrated in numerous studies (Mruk, 2013, 29; Zeigler-Hill, 2013, 18–20).

Self-esteem remains relatively stable over time. For example, adolescents with relatively high self-esteem are likely to have relatively high self-esteem later in life as well (Orth & Robins, 2014). Self-esteem is associated with relatively stable traits, such as personality (Weidmann et al., 2018). For example, Robins et al. (2001) demonstrated a positive correlation between self-esteem and the Big 5 personality traits of extraversion, conscientiousness, agreeableness, openness, and emotional stability. Overall, 34% of the variance in self-esteem was explained by the Big Five personality traits. Consistent across cultures, self-esteem increases from adolescence to middle adulthood, peaks between the ages of 50 and 60, and declines in old age. Males tend to report higher self-esteem compared to females. (Bleidorn et al., 2016; Orth & Robins, 2014.)

Three standard categories of definitions of self-esteem have emerged and persisted over time: self-esteem as competence, self-esteem as self-worth, and self-esteem as a two-dimensional construct consisting of both, competence, and self-worth (Mruk 2013, 22–41). James (1890) whose conception of self-esteem falls into the category of competence, was the first one to provide a psychological definition of self-esteem (Mruk, 2013, 11–14). As paraphrased by Zeigler-Hill (2013, 11), James characterized self-esteem as the "sense of positive self-regard that develops when individuals consistently meet or exceed important goals in their lives." Even more than a century later, this competence-based approach remains relevant (Zeigler-Hill, 2013, 11).

Self-competence refers to a sense of self-efficacy and power (Tafarodi & Vu, 1997). It reflects an individual's belief and trust in his abilities to overcome challenges and achieve personal goals (Kurtovic et al., 2018). These challenges or goals can be very mundane, such as learning to walk, earning a living, and improving one’s social skills, or they can be profound challenges, that change who one is in a deeper sense, such as when losing a loved one (Mruk, 2013, 42). Challenges that require competence relate to an outcome that is still uncertain (Mruk, 2013, 42). Uncertainty derives from not knowing whether something will happen. For example, an adolescent learning to drive a car is more uncertain about his driving skills at the beginning of his learning curve compared to later. However, competence is not merely about skills or capabilities. It encompasses the value of oneself as a causal agent and intentional being. (Tafarodi & Milne, 2002.)

Another way to characterize self-esteem is as an assessment of one's worth, which falls under the category of self-worth (Mruk, 2013,22–31). For example, Kärchner et al. (2021) define global self-esteem as an individual's overall assessment of the self in terms of self-liking, self-worth, and self-acceptance. Self-worth reflects the perceived value or quality of one's actions. It can be regarded as a general feeling of one's worthiness, or more practically, a sense of whether one is feeling good about oneself. Some researchers describe self-esteem as a process of evaluation, while others view self-esteem as a more active and dynamic process. (Mruk, 2013, 21–41.) Rosenberg et al. (1995) defined self-esteem as a general attitude towards oneself, that consists of affective and cognitive elements. Affective elements include positive and negative feelings towards the self, that vary in intensity. Cognitive elements encompass thoughts about oneself. (Rosenberg et al., 1995.)

Worthiness is related to having a sense of meaning and virtue. Making choices that are virtuous and feel "just and right" improves one's self-esteem healthily, since holding up to living virtuously provides both, a sense of worthiness and a feeling of competence. (Mruk 2013, 42.) On the contrary, making choices that are not in line with what makes oneself feel valuable, can lead to a decreased feeling of worthiness (Crocker et al., 2003). In an empirical context, researchers have described worthiness as self-liking. Self-liking refers to whether one feels generally accepted and valued, or socially worthy. (Tafarodi & Swann Jr, 1995; Tafarodi & Vu, 1997.) Thus, worthiness is linked socially (Tafarodi & Swann Jr, 1995).

The unidimensional definitions of self-esteem, consisting of either competence or worthiness, have been challenged by subsequent research (Mruk, 2013, 7–29). One of the first definitions supporting the two-dimensional approach was provided by Branden (1969, 110), who argued that self-esteem consists of two interrelated aspects: "a sense of personal efficacy and a sense of personal worth" (Mruk, 2013, 18). Gecas (1971) was arguably the first one to show this empirically, identifying self-esteem as a two-dimensional model consisting of both self-worth and self-competence (Mruk, 2013, 7–39). Since the 1970s several researchers have empirically tested the two- and multifactor characteristics of self-esteem (Mruk, 2013, 32–26). For example, in a principal component analysis, Owens (1993) found two distinct components of self-esteem: self-confidence and self-depreciation. Tafarodi and Milne (2002) examined data gathered using the widely accepted Rosenberg self-esteem scale, suggesting that global self-esteem

consists of self-competence and self-liking. Both findings indicate the existence of two separate components of self-esteem, of which one relates to self-competence and the other to self-worth.

2.3.3 Fragile Self-Esteem: Contingent Self-worth and Unstable Self-Esteem

The experience of success and failure plays a significant role in the formation of both the positive and negative dimensions of self-esteem. Achievement in a task often leads to feelings of worthiness and contributes to a sense of self-acceptance (Tafarodi & Vu, 1997, 627). Conversely, failure can trigger feelings of self-doubt and even self-hatred, particularly among individuals with low self-esteem. Such individuals are prone to engage in profound introspection following even minor failures, which may culminate in feelings of unworthiness. (Tafarodi & Vu, 1997.)

Self-esteem is most beneficial when it is secure rather than fragile, indicating a deeply rooted and stable sense of self-worth that is not easily threatened. Hence, there is more to self-esteem than whether it is high or low. A secure sense of self-esteem is less susceptible to fluctuations and enables individuals to accept, appreciate, and value themselves, including their imperfections, without the need to enhance their self-esteem or to feel superior to others. (Kernis, 2003). Thus, people with secure self-esteem are less vulnerable to external evaluations, less affected by insults or provocative feedback, and therefore less likely to become defensive (Kernis, 2003; Kernis et al., 1989.) Rather than making success or failure a matter of self-worth, their evaluation of events related to themselves remains tied to their performance in the specific domain. Although they may feel disappointed or sad after failing to achieve something, they do not easily connect these emotions to their feelings of self-worth. (Kernis, 2003.) As a result, they score high on psychological functioning (Kernis, 2003; Paradise & Kernis, 2002).

Unstable self-esteem is fragile and therefore insecure. The word "fragile" indicates that self-esteem is vulnerable to evaluation and therefore vulnerable to fluctuation. (Kernis, 2003.) The self-image of individuals with unstable self-esteem is more easily challenged. As a result, they are preoccupied with maintaining and enhancing their self-esteem and thus behave defensively when their self-esteem is at stake. These self-protective and self-enhancing strategies serve to maintain and increase self-esteem that would otherwise be

low. (Kernis, 2003.) For example, people with unstable self-esteem are more likely to make excuses to increase self-esteem after a negative self-relevant event (Kernis et al., 1992).

Self-esteem can be fragile, even when it is high (Kernis, 2003). Four categories emerge from the comparison of overall self-esteem and self-esteem stability: high stable self-esteem (secure), high unstable self-esteem (fragile), low unstable self-esteem (fragile), and low stable self-esteem (fragile) (e.g., Kernis, 2003, 2005; Kernis et al., 1989, 1992, 2000). Within an individual, the level of self-esteem stability may differ from the level of total self-esteem. This is despite the significant correlation between overall self-esteem and self-esteem stability, suggesting that individuals with higher self-esteem are likely to have more stable self-esteem. (Kernis et al., 2000.)

Another related indicator of fragile self-esteem is self-worth contingency. Self-worth is contingent when its maintenance depends on external factors such as success in competition, approval by others, or achievement of financial or academic success (Crocker & Luhtanen, 2003; Kernis, 2003; Park et al., 2017). Contingent self-worth depends on the achievement of self-validating goals. As long as these self-validation goals are met, self-worth and consequently, self-esteem remain relatively high and stable. However, when goals are not met, self-esteem drops and becomes unstable. Thus, the dependence of self-worth on appraisals makes self-esteem vulnerable to fluctuations when goals are not met. (Crocker & Park, 2004; Kernis et al., 2000.) For example, Crocker, Karpinski, et al. (2003) found that students whose self-worth was highly dependent on academic success experienced a greater decrease in self-esteem after receiving poor grades. Failing academically made individuals with academically contingent self-worth feel worthless and thus lowered their self-esteem.

There are different views of what constitutes optimal self-worth contingency. Crocker, Luhtanen, et al. (2003) suggested that optimal self-esteem can be viewed as a continuum ranging from internal contingency, which is resilient, and external contingency, which is fragile. For example, they suggested that being accepted by others is a highly external domain of contingency, whereas being in line with religious beliefs is a highly internal domain. Contradicting Crocker, Luhtanen et al., Kernis (2003) argued that optimal self-esteem is not contingent at all. Rather, he suggested that self-esteem is high or low in contingency, depending on how external the contingency is.

Drawing on Self-Determination Theory, Vonk and Smit (2012) criticized the idea that optimal self-esteem is non-contingent, arguing that low self-worth contingency is a defensive mechanism against falling under any kind of judgment, similar to a state of amotivation. Instead, they proposed that optimal self-esteem is congruent with intrinsic motives and supports the integration of the self. They argued that small fluctuations in self-esteem are important in motivating people to learn and adapt to their environment. Despite contradictions about what constitutes optimal self-contingency, it seems clear that high self-worth contingency is fragile and dependent on external events, feedback, or validation from others (e.g., Crocker, Karpinski, et al., 2003; Kernis, 2003; Vonk & Smit, 2012).

Crocker, Luhtanen, et al. (2003) argued that it is more important to recognize the domain of contingency than to judge whether or not self-esteem is contingent in general. They argued that people are particularly motivated to put effort into the domain on which their self-esteem is contingent. To illustrate, Kanat-Maymon et al. (2018) found, that self-worth contingent on the domain of gaining approval from others is positively associated with excessive use of Facebook. Crocker and Park (2004) posited, that self-worth is tied to domains that serve as a means of feeling safe from experienced childhood dangers. They suggested that contingencies occur primarily in domains related to these dangers. Von Soest et al. (2016) argued that people experience higher self-esteem in domains that are socially valued, such as romantic attractiveness or physical appearance. However, despite variations across domains, Crocker and Luhtanen (2003) found, that participants, whose self-worth was externally contingent on one domain exhibited contingent self-worth on other external domains as well.

3 Towards a Motivational Perspective on Hyperopia within the Context of Self-Regulation

3.1 Introduction

This section (3) introduces three theoretical perspectives that are relevant to this research: The Self-Control Theory (SCT), the Self-Determination Theory (SDT), and the Motivational Identity Construction Theory (MICT). The Self-Control Theory will be examined to identify paradigmatic assumptions of hyperopia that are dependent on self-control theory. The MICT is used as a theoretical perspective to identify motives of identity construction that impact farsighted decision-making preferences. The SDT is applied to provide an alternative approach to explain the link between self-regulation and motivation in the context of farsighted decision-making. In sum, Self-Control Theory represents the classical self-control approach to hyperopia, whereas the MICT and the SDT are introduced to provide a motivational perspective to the construct.

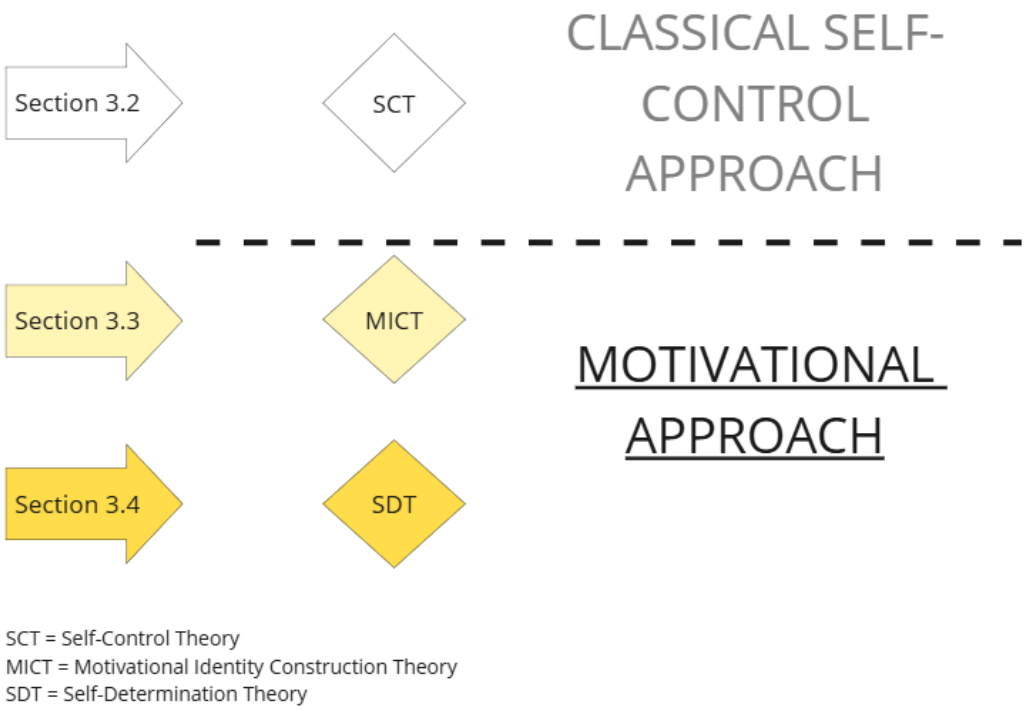

Figure 2. Theoretical approach

3.2 Underlying Assumptions of Self-Control Theory in Hyperopia

3.2.1 Introduction

This section (3.2) presents key paradigmatic assumptions of hyperopia that stem from Self-Control Theory. Because hyperopia was first characterized as the opposite of the myopic self-control problem, these theoretical assumptions tend to apply to both myopia and hyperopia (Kivetz & Keinan, 2006; Kivetz & Simonson, 2002b). However, this section focuses on elements relevant to the characterization of hyperopia. Examining the implicit assumptions of hyperopia allows for a clearer understanding of the limitations of hyperopia that arise from its theoretical assumptions. Hence, this section provides a deeper understanding of how hyperopia is conceptualized. This provides greater visibility to the chain of evidence for the conceptual approach of this research. (see Jaakkola, 2020.)

3.2.2 The Intrapersonal Conflict

The intrapersonal conflict (i.e., intrapersonal conflict, self-control conflict) is inherent in the characterization of hyperopia (Haws & Poynor, 2008). An intrapersonal conflict is an intrapsychic conflict between two or more conflicting motives (e.g. Inzlicht et al., 2021, 321; Thaler & Shefrin, 1981; Vosgerau et al., 2020) The intrapersonal conflict arises due to discrepancies between different preferences of choices within an individual (see Hoch & Loewenstein, 1991; Thaler & Shefrin, 1981; Vosgerau et al., 2020). For example, a person might be torn between staying up late at a party and waking up feeling energetic the next morning. For a self-control conflict to occur, decisions must involve conflicting preferences (Vosgerau et al. 2020). A hyperopic intrapersonal conflict is a conflict between preferences in which the decision-maker has a tendency towards making a hyperopic choice (i.e. hyperopic self-control problem; Kivetz & Simonson, 2002b; Mehta et al., 2014).

Economists have developed models to explain the conflict between different intrapersonal preferences. These are called multiple self-models. (Kivetz & Simonson, 2002b; Schelling, 1984.) A frequently cited model called the planner-doer model was introduced by Thaler and Shefrin (1981), who described the intrapersonal conflict as a conflict of

interest between two selves: the farsighted planner and the shortsighted doer. According to the planner-doer model, the planner and the doer have conflicting interests. Whereas the doer is shortsighted (myopic) and interested in the immediate benefit, the planner is farsighted and wants to maximize lifetime utility. As a decision-making duo, the doer is concerned with engaging in consumption, and the planner aims to maximize lifetime utility by controlling the doer's consumption activities.

An alternative model, the desire-willpower model, was introduced by Hoch and Loewenstein (1991), who presented the self-control conflict of a consumer as a "struggle between two psychological forces of desire and willpower". They assumed that consumers previously decide on their long-term preferences. When the impulse to purchase a product arises, consumers must exert willpower to overcome their immediate desires and adhere to their long-term course of action. If the strength of the desire in question exceeds the capacity for willpower, consumers yield to their desires. Schelling (1984) noted that economists can make a clear separation between preferences and cognitive abilities, while, for example, philosophers and psychologists understand the meaning of the self differently.

Hyperopia has been examined in relation to self-control, rather than in relation to conflict-free forms of self-regulation. Self-control can be distinguished from self-regulation based on the presence of an intrapersonal self-control conflict (Fujita, 2011; Inzlicht et al., 2021). Self-control refers to the process of resolving a self-control conflict, for example, by anticipating retrospective regret (Fujita, 2011; Inzlicht et al., 2021; Keinan & Kivetz, 2008). However, self-regulation can also be conflict-free, such as when regulating one's actions to conform to a standard of behaviour, and thus, it does not always involve intrapersonal conflicts (Fujita, 2011; Inzlicht et al., 2021). For example, a basketball throw cannot be defined as a self-control conflict, because the player does not usually feel tempted to miss the throw (Fujita, 2011). Thus, self-control does not involve self-regulatory means, which are not concerned with the intrapersonal conflict per se.

3.2.3 Two Self-Control Paradigms Underlying Assumptions of Hyperopia

The assumptions of two self-control paradigms are present in the conceptualization of hyperopia. Both paradigms have been used synonymously in extant research on

hyperopia. This section (3.2.3) presents these paradigms: the vice-virtue paradigm and the hedonic-utilitarian paradigm.

The vice-virtue paradigm follows the idea that consumers make trade-offs between immediate pleasure and longer-term benefits. At the same time, consumers are concerned with changes in preferences over time. In other words, the paradigm addresses the issue of changing preferences over time: what the consumer wants now is not necessarily what he wants tomorrow or one year from now. (U. Khan et al., 2005.)

The vice-virtue paradigm assumes that consumer preferences are time-inconsistent, meaning that preferences change over time (U. Khan et al., 2005; Vosgerau et al., 2020). A choice or preference is time-inconsistent if it would not have been made from a detached, dispassionate perspective. Conversely, time-consistent preferences remain relatively constant over time and are therefore more farsighted and virtuous. (Hoch & Loewenstein, 1991.) Thus, farsighted choices are relatively more time-consistent compared to short-sighted choices (Wertenbroch, 1998). Time-inconsistent preferences arise often from sudden increases in desire (Hoch & Loewenstein, 1991). For example, when consumers are hungry, their desire for pleasure temporarily increases, making them more likely to make short-sighted decisions (Otterbring, 2019). However, afterwards, time-inconsistent preferences are often regretted because preferences change.

The vice-virtue paradigm suggests that intrapersonal conflicts involve choices between costs and benefits, which occur at different times. A short-sighted consumer makes choices in favour of immediate gratification and at the expense of the future (Shefrin & Thaler, 1980; Wertenbroch, 1998). For example, the benefits of staying out late might be immediate, whereas the negative consequences may come later, such as feeling tired or hungover the next morning. A farsighted consumer prefers delayed consumption consequences over immediate ones (Wertenbroch, 1998). Choices made without considering or giving preference to long-term consequences are characterized as relative vices, whereas the preference for delayed consumption consequences over immediate ones is characterized as a relative virtue. Farsighted choices are important since they affect health, wealth, and happiness in the long term. (Frederick et al., 2002). For example, repeated choices of vices, such as the constant consumption of unhealthy food, can have long-term effects on health.

The second key paradigm underlying the construct of hyperopia is the hedonic-utilitarian paradigm, which focuses on the trade-off between pleasure and more functional goals. Often, the focus of consideration is on barriers to choosing hedonic options, such as guilt or regret. (U. Khan et al., 2005.) Regret, the anticipation of regret, and barriers to choosing hedonic options are also central elements in hyperopia reserarch (Haws & Poynor, 2008; Kivetz & Keinan, 2006; Kivetz & Simonson, 2002b).

The hedonic-utilitarian paradigm distinguishes between utilitarian and hedonic goods. Utilitarian goods fulfil functional needs, while hedonic goods are more experiential and are consumed for fun, pleasure, and excitement. (U. Khan et al., 2005.) For example, holiday resorts and ice cream are often considered hedonic, whereas a cold-weather jacket, cooking oil, and dishwashing detergent are often considered utilitarian (Crowley et al., 1992). The distinction between utilitarian and hedonic goods is often blurred, as a single good can satisfy both hedonic and utilitarian needs (Alba & Williams, 2013; Crowley et al., 1992). Consumers may even have difficulties realising whether their consumption motive is primarily utilitarian or hedonic (Alba & Williams, 2013). For instance, soap may be purchased primarily for hedonic or utilitarian reasons. Moreover, experiences are not always hedonic and materials utilitarian. For example, using public transport can be a primarily utilitarian experience (Kousi et al., 2023).

Hedonic and utilitarian options can be further classified into hedonic luxuries and utilitarian necessities, based on the assumption that consumers make choices according to a hierarchy of needs. According to this view, necessities are relatively more fundamental needs compared to luxuries. Necessities, such as food, shelter, and medical care, are required to maintain a sufficient standard of living. Conversely, luxuries denote items representing indulgence or self-gratification, such as dining out, buying expensive clothing, and thus succumbing to personal desires. (Kivetz & Simonson, 2002a, 2002b.) Luxuries satisfy hedonic desires, while necessities satisfy utilitarian needs (U. Khan et al., 2005).

The hedonic-utilitarian paradigm emphasizes the trade-off between utilitarian and hedonic needs. Hedonic consumption can be costly and have negative health effects (Alba & Williams, 2013). For example, eating fast food may be tempting and enjoyable, but it raises cholesterol and blood fat levels and increases the likelihood of obesity (Healey, 2012). Similarly, choosing luxuries over necessities when money is scarce leads

consumers into financial turmoil (Xu & Schwarz, 2009). As hedonic indulgences are lower in the hierarchy of needs, consumers tend to prioritize necessities over luxuries. (Kivetz & Simonson, 2002b, 2002a.) In addition, hedonic purchases may be seen as wasteful and therefore regretted (Kivetz & Simonson, 2002b). Consumers find it difficult to justify hedonic consumption and often associate it with feelings of guilt. For example, consumers tend to pay for hedonic items in effort (time) and utilitarian items in money, because the cost of time is easier to justify than the cost of money. (Okada 2005.) Compared to hedonic luxuries, utilitarian necessities do not evoke guilt because they are perceived as necessary.

The vice-virtue paradigm and the hedonic-utilitarian paradigm can be linked. U. Khan et al. (2005) argued that utilitarian goods are more likely to have farsighted benefits compared to hedonic goods. They suggested that the benefits of hedonic goods tend to be experienced during consumption, whereas the benefits of utilitarian goods are instrumental and often occur after the act of consumption. Okada (2005) argued that the choice between relatively utilitarian and relatively hedonic alternatives does not necessarily involve an intertemporal trade-off between the present and the future, as both hedonic and utilitarian products offer different types of benefits. However, he suggested that when resources are limited, choices affect future consumption in general, so that consumers with greater financial constraints feel a greater need to justify hedonic consumption. For example, university students are financially relatively constrained. In Finland, university student households have the second lowest income rates following unemployed households, with around 13,600 euros per capita (Official Statistics of Finland, 2019). Hence, university students with greater financial constraints have fewer opportunities to spend money on indulgences.

The vice-virtue paradigm and the hedonic-utilitarian paradigms have been used interchangeably in pioneering studies of hyperopia (e.g. Keinan & Kivetz, 2008; Kivetz & Keinan, 2006; Kivetz & Simonson, 2002b, 2002a), although they originate from two different streams of research (Okada, 2005). The definition of hyperopia as avoidance of indulgence is consistent with the hedonic-utilitarian paradigm (see Haws & Poynor, 2008). It emphasizes the aversive attitude towards hedonic pleasures as opposed to their more utilitarian counterparts. On the other hand, characterizing hyperopia as excessive farsightedness, emphasizing excessive future orientation relative to present orientation, is consistent with the vice-virtue paradigm (see Kivetz & Keinan, 2006). The presence of

two self-control paradigms in the characterization of hyperopia underscores that the definition of hyperopia as a construct remains dependent on the self-control literature and its basic assumptions.

3.3 Self-Esteem and Self-Continuity as Identity Motives in Farsighted Decision-Making: A Motivational Identity Construction Theory Perspective

3.3.1 Introduction

In this thesis, the Motivational Identity Construction Theory (MICT) is adopted as an approach to examine hyperopia from a motivational perspective. This section (3.3) introduces future self-continuity (FSC) and self-esteem as motives of identity construction. The relevance of these identity motives to this research stems from their potential role in influencing farsighted decision-making preferences.

3.3.2 Self-Esteem and Continuity as Identity Motives

According to the Motivated Identity Construction Theory (MICT), identity motives can be defined as "pressures toward certain identity states and away from others, which guide the processes of identity construction". Identity motives often exist at an unconscious level and are not directly visible. (Vignoles et al., 2006.) They influence behavior by promoting certain ways of seeing oneself that a person is drawn to (V. L. Vignoles, 2011). The satisfaction of identity motives is likely to have positive effects on psychological well-being. Accordingly, individuals typically desire and strive to construct identities that satisfy identity motives and fear and avoid identities that do not. (V. L. Vignoles, 2011.) Similarly, the desire or fear of potential identity elements is likely to reflect the extent to which those elements satisfy identity motives. Consequently, aspects of identity that are perceived to satisfy identity motives are more likely to be perceived as especially central and self-defining to one's identity. (V. L. Vignoles et al., 2006.)

According to the MICT, six different identity motives related to identity construction exist, which are as follows:

> the Self-esteem Motive (the need to regard oneself positively),
> the Continuity Motive (the need to maintain continuity between past, current and future selves),
> the Efficacy Motive (the need to feel competent and capable of influencing one's environment),
> the Meaning Motive (the need for a meaningful life),
> the Distinctiveness Motive (the need for distinctiveness from other people), and
> the Belonging Motive (the need to be accepted within one's social environment).
> (V. L. Vignoles, 2011.)

Due to the scope of this study, only the self-esteem motive and the continuity motive are more thoroughly examined.

Self-esteem and continuity are central motives of self-definition. Vignoles et al. (2006) examined the identity motives that underlie the construction of current identity. They asked participants to identify 12 aspects of their identity by asking them to complete the sentence "I am...". Identity aspects could have been, for example, "student", "athlete", "girl", "interesting", or "happy". (Kuhn & McPartland, 1954). Participants then rated these identity elements in terms of how central they were perceived to be, and associations between these identity elements and identity motives were measured. Identity elements that provided self-esteem, continuity, distinctiveness, and meaning were considered more central to participants' self-definitions and were more emphasized in everyday actions. Thus, the study showed that both continuity and self-esteem are essential identity motives that can be satisfied by certain identity elements. The need to satisfy these motives triggers behavioural outcomes toward certain identity elements (V. L. Vignoles, 2011).

3.3.3 The Role of Self-Esteem and Self-Continuity in Forming Farsighted Preferences

Identity motives influence farsighted preferences. Vignoles et al. (2008) explored the underlying identity motives behind the construction of possible future personal identities by asking participants to specify up to 10 possible future identities, such as "mother", "happy", "rich", or "dead". Four underlying motives were directly reflected in the construction of possible future identities: self-esteem, continuity, efficacy, and meaning. Participants were found to desire future aspects of identity they believed would satisfy

these motives. Conversely, they feared identities that would frustrate motives of self-esteem, continuity, efficacy, and meaning. Due to the scope of this study, only continuity and self-esteem will be further discussed.

Vignoles et al. (2008) argued that continuity is primarily a stabilizing force rather than an ideal to be amplified. They found that participants were motivated to avoid losing their sense of self-continuity rather than to enhance it over time. Hence, participants desired identity elements in future selves that provided continuity with the current self and feared that that continuity would be marginalized in their future identities. Yet, they did not desire to maximize feelings of continuity. Vignoles et al. suggested that continuity would push people to avoid discontinuity rather than to seek to increase continuity. Importantly, the need for continuity was demonstrated to be different from the need to maintain a constant personal identity, since identity changes can provide continuity as much as identity stability.

Self-esteem differs from continuity as an identity motive. Vignoles et al. (2008) found that in contrast to continuity, participants aimed not only to maintain but also to enhance their self-esteem in future identities. Elements of identity that promised self-esteem were not only desired to be maintained but also desired to become more central parts of their future identities. Hence, whereas continuity was found to be a maintenance goal, self-esteem was found to be both an enhancement and a maintenance goal when forming future identities, indicating that the identity motive of self-esteem is more likely to become a goal to be amplified. Vignoles et al. (2008) suggested that the desire to enhance and maintain self-esteem is linked to the sociocultural and interpersonal context. They argued that people fear being socially negatively regarded, proposing that future selves, who are not valued by their sociocultural and interpersonal contexts, are less desired and more feared, highlighting the importance of social acceptance and self-worth in farsighted identity preferences.

The identity motives of self-continuity and self-esteem differ in terms of farsightedness. Self-continuity is about maintaining a continuous sense of identity, whereas self-esteem is prone to amplification. Therefore, the motives for self-continuity and self-esteem play different roles in forming farsighted preferences. Self-continuity is a maintenance goal, which is unlikely to become excessive as a result of amplification. (V. L. Vignoles et al., 2008.) Therefore, it is likely to predict truly farsighted decision-making. On the other

hand, self-esteem may become excessive as a result of amplification and is therefore more likely to lead to hyperopic farsightedness. These relationships are further examined in the upcoming sections of this thesis.

3.4 Linking Motivation and Self-Regulation – A Framework from Self-Determination Theory

3.4.1 Introduction

This section (3.4) introduces the theoretical perspective of Self-Determination Theory (SDT), which is central to this research. SDT provides a perspective on identity in relation to living a flourishing life (Ryan & Deci, 2017, 382–388). Moreover, the Organismic Integration Theory, a sub-theory of the SDT, links motivation to self-regulation. By introducing the theoretical approach of the SDT, this section provides the basis for an alternative conceptual perspective on farsighted decision-making in the context of motivation, self-regulation, and identity.

3.4.2 Identity and the Satisfaction of Core Psychological Needs

The Self-Determination Theory (SDT) examines what shapes identity construction. Although it was not originally designed to explain identity construction, the core principles of the SDT can be applied to identity development. (Soenens & Vansteenkiste, 2011.) The SDT approaches identity often from the perspective of whether identity is consistent with inner psychic growth, in other words, with the self as a process. Therefore, while the MICT aims to elucidate the motives for identity construction per se, self-determination theory approaches identity construction from the perspective of whether it satisfies more deeply rooted core psychological needs. (Soenens & Vansteenkiste, 2011; V. L. Vignoles, 2011.) Furthermore, the SDT tends to emphasize elements of identity that are associated with behavior, such as social roles like occupation and relationships. Conversely, the capacity of the SDT to predict non-behavioral aspects of identity, such as nationality or body image, is less well established. (V. L. Vignoles, 2011.) This makes SDT a suitable approach for examining the behavioral motives of hyperopia.

According to the SDT, identity is formed to satisfy three core psychological needs: competence, autonomy, and relatedness. The simultaneous satisfaction of autonomy, competence, and relatedness enables the integration of the self, which in turn allows for psychological growth and higher psychological functioning and well-being (Deci & Ryan, 2000; Ryan & Deci, 2012). The need for competence arises as a tendency to adopt identities that allow the improvement of skills and knowledge, and to feel more competent. (Ryan & Deci, 2012.) The need for autonomy refers to the need to experience a sense of self-direction and inner will in one's actions, along with psychological freedom within one's identity (DeCharms, 1968 as cited in Ryan & Deci, 2011). The need for relatedness embodies the need for secure belonging and connection with others, which is fostered through the acquisition of identities that fit social roles and values (Ryan & Deci, 2012).

According to the SDT, the satisfaction of core psychological needs is a fundamental aspect of identity development. On the one hand, people are drawn to identities that allow them to better meet their core psychological needs (Ryan & Deci, 2012). On the other hand, the satisfaction of core psychological needs influences identity development. It promotes identity choices that one can endorse and identify with. Thus, it has an energizing effect on identity development. (Luyckx et al., 2009.)

According to the SDT, healthy identity is formed through two types of interrelated processes: the discovery of intrinsic needs and interests, and the internalization of social values and roles. The exploration of intrinsic needs and interests is autonomous and emerges through the pursuit of particular competencies and passions. (Ryan & Deci, 2017, 382–388.) For example, someone may be intrinsically interested in playing chess. The internalization of social values and roles is an extrinsically motivated process. Through the process of internalization, external motivation becomes more autonomous and thus, more self-determined. (Pelletier & Rocchi, 2023, 55-64; Ryan & Deci, 2017, 382–388.)

Sccording to the SDT, identities are unhealthy when they undermine the satisfaction of core psychological needs. A common perspective of SDT concerns the alignment of identity with the self, specifically, whether the identity satisfies core psychological needs and is thus congruent with the self. Identity can be more or less consistent with the self. An identity less aligned with the satisfaction of psychological needs is less consistent with

the self and, therefore, undermines psychic growth. (Soenens & Vansteenkiste, 2011.) Then, people may find it difficult to form deeper connections with others and to create an authentic sense of meaning, thus failing to meet core needs for a flourishing life (Ryan & Deci, 2017, 382–388.) Hence, the adaptation and integration of identities that are in alignment with the satisfaction of core psychological needs is important in terms of well-being.

3.4.3 Self-Regulatory Styles and Motivation

This section (3.4.3) focuses specifically on the relationship between self-regulation and motivation. The perspective presented in this research refers to regulation rather than self-regulation (e.g. Deci & Ryan, 2000). In the context of this research, regulation and self-regulation can be considered synonymous.

Motivation can be extrinsic, intrinsic, or one can be amotivated. Motivation refers to being moved by something. A person with motivation feels energized and activated to engage in action. An amotivated person lacks the inspiration or drive to act. Motivation varies based on the reasons that drive a person's actions. Motivation is intrinsic when a person does something for its inherent satisfaction. (Ryan & Deci, 2000) For example, someone may be intrinsically motivated towards gardening because she finds a sense of peace and fulfilment in nurturing plants. Motivation is extrinsic when a person does something because it leads to a separable outcome (Ryan & Deci, 2000). For example, a person might save money to buy a house. This research focuses on external motivation because it involves the potential for conflicting desires.

The relationship between self-regulation and motivation has been examined in the Organismic Integration Theory (OIT), a sub-theory within the Self-Determination Theory (SDT). The OIT explains the impact of social contexts on motivation and focuses especially on different forms of extrinsic motivation (Pelletier & Rocchi, 2023; Ryan & Deci, 2017). Organismic integration refers to the continuous process of organizing and unifying one’s experiences into a cohesive internal structure that aligns with personal values and supports self-development (Ryan & Deci, 1985). Through this process of integration, external values, beliefs, and behavioural regulations are adapted and internalized (Ryan et al., 1985 as cited in Ryan & Deci, 2017, 180). A key proposition of

the OIT is that the effectiveness of internalization varies, resulting in different degrees of autonomy and different self-regulatory styles (Ryan & Deci, 2017b, 182). Well-internalized regulation is more aligned with intrinsic goals and values, and therefore more autonomous and self-determined. Less internalized external motivation is more externally controlled and regulated, and therefore, less self-determined. (Pelletier & Rocchi, 2023.)

OIT distinguishes between four different regulatory styles on a self-determination continuum depending on the degree of internalization: external regulation (controlled), introjected regulation (controlled), identified regulation (autonomous), and integrated regulation (autonomous; Deci & Ryan, 2000). External regulation is the most extrinsically motivated regulatory style and refers to behaviour dependent on receiving external reward or punishment and is thus instrumental. For example, a student who avoids cheating in an exam for fear of being caught and punished is externally regulated. This controlled form of regulation is difficult to sustain over time. Another controlled regulatory style is introjected regulation. It is relatively more autonomous compared to external regulation. In contrast to external regulation, introjected regulation is motivated by living up to judgments and evaluations that take place within a person. (Ryan & Deci, 2017, 185–186.) Introjected regulation is controlled rather than autonomous because it is guided by introjected beliefs of what one should do rather than by self-determined choices, and thus, dependent on external contingencies rather than genuine self-endorsement (Pelletier & Rocchi, 2023). It is often motivated by the need to avoid negative feelings of shame and guilt. More intrinsic needs are neglected by feelings of pride experienced when satisfying internal contingencies (Ryan & Deci, 2017b, 185–186).

Identified regulation and integrated regulation are relatively more autonomous regulatory styles of external regulation. On the self-determination continuum, introjected regulation is followed by identified regulation. Identified regulation refers to the conscious

Figure 3. Self-determination continuum

endorsement of values and regulations that function as a basis for experienced autonomy. (Ryan & Deci, 2017b, 187–188.) For example, a student who identifies with the value of exercising falls into the category of identified regulation. Although the student has managed to identify with the health benefits of sports, she may not yet have determined the value of exercising in relation to other aspects of her identity. The most integrated form of regulation is called integrated regulation. It is the most autonomous form of extrinsic motivation. Integrated regulation involves the successful integration of regulation or value with other aspects of the self. Regulation is more effective, the more integrated a value or goal. (Ryan & Deci, 2017b, 187–188.)

4 Identity Motives as Predictors of Hyperopia

4.1 Distinguishing between Hyperopia and True Farsightedness

4.1.1 Introduction

Choosing the farsighted option over a more short-sighted one is regarded as the right thing to do according to classical self-control paradigms. In the context of myopia, choosing the farsighted option over the short-sighted one is the better decision in the long term. However, hyperopia theory has demonstrated that some consumers regret choosing a farsighted, utilitarian option over a short-sighted, hedonic one. (Kivetz & Keinan, 2006.) This anomaly has made hyperopia a paradox among more traditional self-control assumptions. Researchers have tried to explain the anomaly of hyperopia in the context of Self-Control Theory (Kivetz & Keinan, 2006; Loewenstein, 2018; Mehta et al., 2014). Section 4.1.2 explores what constitutes farsightedness from the classical self-control perspective in hyperopia and presents alternative perspectives that explain what constitutes farsightedness from the perspective of Self-Control Theory (SCT). Section 4.1.3 introduces an alternative Self-Determination Theory (SDT) perspective on what constitutes a truly farsighted choice, which will be further adopted in this research.

4.1.2 Farsightedness in the Context of Hyperopia: Classical and Revised Approaches

Several widely used definitions of farsightedness exist in Self-Control Theory. From the perspective of the vice-virtue paradigm, farsightedness refers to choosing delayed consumption consequences over immediate ones (Wertenbroch, 1998; see section 3.2.3). According to the hedonic-utilitarian perspective, farsightedness is about choosing relative necessities over relative luxuries (Kivetz & Simonson, 2002b; see section 3.2.3). Farsightedness has also been described in terms of righteousness. According to that perspective, farsightedness is about ‘acting responsibly and doing the “right thing”’ (Kivetz & Keinan, 2006). Taken together, farsightedness can be defined as the responsible and value-driven act of prioritizing long-term benefits and necessities over short-term gratifications and luxuries, while consistently striving to do the "right thing".

Conventional characterizations of farsightedness have been challenged as a consequence of the paradox of hyperopia. Rather than defining hyperopia as an anomaly of self-control, some researchers have offered alternative views of what constitutes farsightedness. (Inzlicht et al., 2021; Loewenstein, 2018; Vosgerau et al., 2020.) Some of these alternative views continue to view hyperopia as a self-control failure (Vosgerau et al., 2020). Hence, these alternative characterizations of farsightedness describe the nature of true farsightedness rather than hyperopia by reconceptualizing what constitutes farsightedness.

Reconceptualizing farsightedness requires the replacement of paradigmatic assumptions of the vice-virtue and hedonic-utilitarian paradigms, which are tied to the conceptualization of hyperopia. Loewenstein (2018) argued that self-control is a matter of deliberation versus affect rather than present versus future. He suggested that while short-term goals are usually driven by affect, some long-term goals are as well. For example, hyperopic consumers may feel tempted (affect) to live frugally (Vosgerau et al., 2020). Loewenstein (2018) proposed that hyperopia occurs when affective influences motivate one to strive for a farsighted goal.

According to Vosgerau et al. (2020) a truly farsighted goal would be a goal that is superordinate. They argued that myopia and hyperopia are both self-control failures since they violate superordinate long-term goals. From this perspective, hyperopic consumers would have an opposite order of preference from myopic consumers as to what constitutes a superordinate goal.

Inzlicht et al. (2021) emphasized that farsighted decision-makers are concerned with the constraint of time. They proposed that self-control conflicts are not necessarily about excessively choosing long-term benefits over short-term benefits, but can be decisions between two goals that may both have farsighted consequences but compete for one's limited time. According to this perspective, hyperopic decisions would become hyperopic only when time is considered.

Hyperopia may be relatively short-sighted after all. Self-control research often overlooks the fact that not all hedonic consumption is necessarily bad (Alba & Williams, 2013). Research has demonstrated that excessively avoiding hedonic preferences may lead to regret (e.g. Kivetz & Keinan, 2006). However, integrating pleasure into utilitarian purchases increases life satisfaction by making mundane activities more enjoyable (Kousi

et al., 2023). By undervaluing the benefits of hedonic consumption, hyperopic consumers pay the cost of general long-term welfare (Alba & Williams, 2013). Hence, hyperopic consumers fail to consider the farsighted benefits of hedonic decisions.

In hyperopic self-control problems, recognizing the optimal choice from the suboptimal one is often not transparent. Therefore, decisions are often made inadequately based on decision rules typical of myopic self-control conflicts, such as making decisions in anticipation of short-term guilt, yielding to regret in the long term. (Keinan & Kivetz, 2008.) For example, a hyperopic consumer might choose to stay longer at work instead of meeting up for a beer with her colleagues. To avoid feelings of guilt related to work performance, staying longer at work seems to be the right choice. In the long run, however, she begins to regret missing out on these life-enriching peer-to-peer gatherings (Keinan & Kivetz, 2008; Kivetz & Keinan, 2006). Because the suboptimal choice is relatively less evident and regretful feelings take longer to build up, the shift in preferences may take longer compared to myopic self-control situations.

4.1.3 True Farsightedness and Conflict-Free Self-Regulation: A Self-Determination Theory Perspective

In the context of hyperopic decision-making, the vice-virtue and hedonic-utilitarian paradigms fail to capture the nature of truly farsighted choices (see Loewenstein, 2018; Vosgerau et al., 2020). Therefore, this thesis distinguishes between true farsightedness and hyperopia. This section (4.1.3) provides the rationale for the assertions made in the Introduction Chapter that form the basis for the alternative theoretical perspective offered in this research. Hence, this section briefly discusses the nature of true farsightedness and conflict-free self-regulation from the perspective of Self-Determination Theory (SDT).

A key assumption in this research is that consumers maximize lifetime utility by maximizing eudaimonic well-being over time. The assumption that consumers maximize life-time utility is common in economic models. For example, one assumption of the planner-doer model by Thaler & Shefrin (1981) is that the farsighted self (the planner) maximizes life-time utility. This thesis goes one step further by assuming that maximum life-time utility is achieved by maximizing eudaimonic well-being.

Eudaimonia is a philosophical concept of well-being that emphasizes the way of living well. Aristotle, the father of eudaimonic philosophy (Ryan et al., 2008), believed that living an eudaimonic life entails fulfilling one's human nature by living according to one's personal and civic virtues. (Martela, 2023, 309–323.) The active pursuit of virtues, which is at the core of eudaimonic living (Ryan et al., 2008), aligns with the paradigmatic understanding in Self-Control Theory (SCT) that decisions are choices between vices and virtues. From the perspective of SDT, eudaimonia can be understood as "a way of living that is focused on what is intrinsically worthwhile to human beings" (Ryan et al., 2008). Hence, it involves the question of virtue in motives and activities (Martela, 2023).

In the context of SDT, the eudaimonic perspective to virtue involves the consideration of both current and future consequences of activities and motives on eudaimonic well-being. Martela (2023, 315) proposes three dimensions that should be considered holistically to determine whether an activity or motive is eudaimonic:

> "(1) whether they bring well-being to the individual carrying them out,
> (2) whether they are individually sustainable in the sense of having beneficial long-term consequences for the individual, and
> (3) whether they are socially sustainable in the sense of having beneficial consequences for the people and society around the individual."

In this research, truly farsighted decision-making refers to the satisfaction of core psychological needs and thus, self-determination in decision-making. According to Ryan et al. (2008), eudaimonia can be described as behavior that satisfies the core psychological needs of competence, relatedness, and autonomy. Hence, the satisfaction of core psychological needs is a key indicator of eudaimonic behavior (Martela, 2023, 315). Therefore, truly farsighted decisions should support the satisfaction of core psychological needs rather than undermine them.

The hedonic-utilitarian paradigm regards yielding to hedonic temptations as a vice rather than a virtue. However, hyperopic consumers, as opposed to truly farsighted consumers, tend to have difficulties allowing themselves to indulge (Haws & Poynor, 2008; Kivetz & Keinan, 2006; Kivetz & Simonson, 2002b). The eudaimonic approach to well-being regards hedonic well-being as an outcome of eudaimonic processes and contents in life (Ryan et al., 2008). Thus, subjective experiences of joy, pleasure, and happiness, among others, are outcomes of eudaimonic well-being but not the source of well-being itself

(Martela, 2023). Therefore, this thesis suggests that instead of yielding to hedonic pleasures, hyperopic consumers should seek eudaimonic well-being and thus, more self-determined psychic functioning.

This thesis approaches conflict-free self-regulation in the light of what constitutes truly farsighted decision-making from the perspective of SDT. In the context of identity motives, the satisfaction of core psychological needs contributes to identity integration. According to SDT, people tend to naturally integrate new perceptions of themselves into existing identity structures that form a synthesized whole representing a person's interests, goals, and values. Through this integrative process, individuals organize identity elements into an evolving sense of self that enables the satisfaction of core psychological needs. However, when identity construction does not support the satisfaction of core psychological needs, the process of self-integration is thwarted. (Deci & Ryan, 2000; Di Domenico et al., 2018; Ryan & Deci, 2017b.) For example, someone may adopt identity elements that undermine the satisfaction of core psychological needs because one lacks feelings of relatedness (La Guardia, 2009).

Consistent with the SDT view of the relationship between identity and psychological needs, the present research suggests that conflict-free self-regulation refers to the process of internalizing and integrating external motivation and identity towards a more intrinsically aligned form of self-regulatory functioning. This form of conflict-free self-regulation contributes to truly farsighted decision-making.

4.2 Future Self-Continuity as a Negative Predictor of Hyperopia

4.2.1 Introduction

This section (4.2) provides theoretical evidence that supports the role of future self-continuity (FSC) in predicting farsighted decisions. Moreover, theoretical arguments are used to better understand the nature of the relationship between FSC and hyperopia in the light of what constitutes a truly farsighted choice. Hypothesis 1 will be proposed concluding this section.

4.2.2 Future Self-Continuity and the Satisfaction of Core Psychological Needs

The neuroscientific view on self-related (self-referential) processing sheds more light on future self-continuity from the perspective of truly farsighted decision-making. In neuroscientific research, the self can be defined as an umbrella term that "encompasses processes related to self-reflection and self-knowledge, as well as personality, emotion, and self-regulation". (Beer, 2012.) Hence, according to this view, the self encompasses all definitions of the self presented in section 2.2.1, including the self as personality, the self as experiencing subject, the self as beliefs about oneself, and the self as executive function (see Leary & Tangney, 2012, 4–5).

Neuroscientific studies have examined FSC from the perspective of self-referential processing. Self-referential processing encompasses the processing of information in relation to oneself and refers to the processing of stimuli that are experienced as personally relevant (Northoff et al., 2006). This high experienced personal relevance is referred to as self-relevance (e.g. Di Domenico et al., 2018). Brain areas involved in self-referential processing include prefrontal brain areas (vMPFC, MPFC) and the related rostral anterior cingulate (rACC).

The brain areas involved in self-referential processing have been examined to determine the degree of FSC. Self-referential processing has been found to elicit higher levels of activation in these brain areas when thinking about the current self compared to when thinking about the future self or someone else. (Ersner-Hershfield et al., 2009; Mitchell et al., 2011.) High FSC has been associated with higher self-referential processing, and therefore, higher levels of activation in the ventromedial prefrontal cortex (vMPFC; Mitchell et al., 2011) and higher activation extending from the MPFC to the rostral anterior cingulate cortex (rACC; Ersner-Hershfield, Wimmer, et al., 2009). Thus, higher activation in these brain areas when thinking about the future self indicates higher levels of FSC (Ersner-Hershfield, Wimmer, et al., 2009; Mitchell et al., 2011).

A higher degree of activation in brain areas responsible for self-referential processing indicates higher self-relevance of identity elements (D'Argembeau, 2013; Di Domenico et al., 2018). D'Argembeau (2013) examined the activation of the ventromedial prefrontal cortex (vMPFC) in self-referential processing. He argued that the activation of the vMPFC depends on the perceived personal significance of self-referential processing contents, suggesting that vMPFC activity increases when the perceived importance of an

identity element under processing increases. Thus, D'Argembeau suggested that self-relevance depends on the perceived subjective importance of the processing content. The higher the perceived self-relevance of an identity element, the higher the level of brain activation in the vMPFC.

Di Domenico et al. (2018) found that self-relevance increases through the satisfaction of core psychological needs. Using Self-Determination Theory as a foundation, Di Domenico et al. examined the relationship between the fulfilment of core psychological needs and activity in the medial prefrontal cortex (MPFC) when judging past, present, and future identities. Results showed that participants with greater fulfilment of meaning, autonomy, and relatedness showed higher levels of MPFC activation when judging past, present, and future identities, whereas participants with lower need fulfilment showed lower levels of MPFC activation. Hence, these results imply that the satisfaction of core psychological needs increases the relevance of identity elements of past, current and future selves in the current moment. Consequently, people with higher need fulfilment should have a higher sense of future self-continuity. This is because the self-relevance of future identities increases when the core psychological needs are satisfied. Di Domenico et al. argued that higher need fulfilment diminishes decisional conflicts between future and current identities. In sum, these findings indicate that the fulfilment of core psychological needs increases the perceived self-relevance of identity elements of future selves, contributing to higher FSC.

Drawing on the findings by Di Domenico et al. (2018) and the view that continuity of identity is an essential aspect of personal identity (James, 1890, 224–401; section 2.2.2, 2.3.1), the relationship between self-determination (i.e., satisfaction of core psychological needs) and the continuity of personal identity over time has been illustrated in the figure below. In the figure, the self represents the self as a process. When core psychological needs are satisfied (high self-determination), past, future, and current identities are more continuous and self-relevant to the current self. This should lead to more truly farsighted decision-making. On the other hand, if psychological needs are not satisfied (low self-determination), personal identity is less continuous. In other words, future and past identities are perceived as more distinct or discontinuous from the current personal identity. The experienced discontinuity towards identities over time is illustrated as gaps between current and past or future identities, whereas high continuity is illustrated as a more continuous and thus, more integrated experience of personal identity over time.

The figure illustrates the relationship between the self as a process and personal identity. If the self as a process is self-determined, future and current personal identities are perceived as more continuous and self-relevant. Hence, a sufficient degree of self-determination is needed to maintain a personal identity that is relatively continuous over time (James, 1890, 224–401).

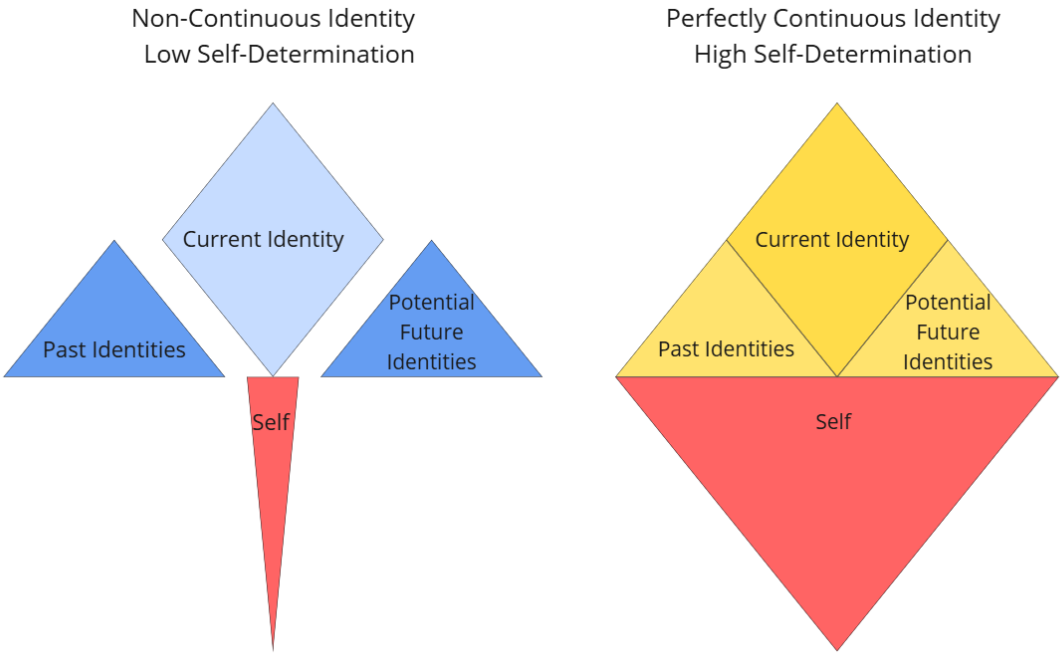

Figure 4. The non-continuous and the perfectly continuous personal identity

This section demonstrates that high FSC is related to truly farsighted decision-making. Drawing on the findings of Di Domenico et al. (2018), it is suggested that the satisfaction of core psychological needs has a positive impact on FSC, indicating a higher integration of past and future identities into the current identity. Hence, the continuity of personal identity over time and the establishment of a personal identity that enables the satisfaction of core psychological needs are intertwined elements, which contribute to an integrated personal identity over time.

4.2.3 Empirical Findings on Future Self-Continuity as a Predictor of Farsighted Choices

Previous research has shown that future self-continuity predicts farsighted decision-making. This section (4.2.3) reviews these previous findings, with implications for the relationship between future self-continuity and hyperopia.

The relationship between FSC and intertemporal preferences was first proposed by the philosopher Parfit (1971). He argued that FSC is important from a survival perspective, positing that if the future self is perceived as a stranger, there is no incentive to postpone rewards in favor of the future self. Conversely, if the future self is perceived as continuous with the present self, it becomes rational to delay gratification into the future. Continuity with the future self can be compared to continuity with current others, such as one's children, friends, or spouse, as opposed to strangers (Hershfield, 2019). The propensity to make sacrifices for a friend is often greater than for a stranger. Furthermore, the degree of experienced connectedness to a more immediate self is stronger than the connectedness with a farther self. Consequently, the benefit of a temporally closer future self is valued more than the benefit of a more distant self. (Bartels and Rips, 2010.)

Researchers have suggested that increasing FSC increases farsightedness. Bartels and Urminsky (2011) suggested that enhancing FSC would serve as an effective solution to myopic self-control conflicts and promote farsightedness. Hershfield (2019) argued that high FSC increases the probability of optimal farsighted decisions. Accordingly, he suggested that strengthening one's connection to the future self improves long-term decision-making and maximizes well-being over time.

Bartels and Urminsky (2011) argued that hyperopic choices would be a consequence of excessive connectedness to the future self. In other words, they proposed that hyperopic consumers over-allocate the utility of the future selves at the expense of the current self, suggesting that hyperopia would result from excessive FSC. However, this relationship has not been tested empirically.

Contradicting Bartels and Urminsky (2011), this research suggests that FSC cannot be excessive, because it predicts truly farsighted decision-making rather than hyperopic decision-making. One argument in support of this view can be developed from the perspective of time-inconsistent preferences. Regret arises as a consequence of time-

inconsistent preferences (Hoch & Loewenstein, 1991). Therefore, decisions are truly farsighted when preferences remain constant over time. Parfit (1984, 300) argued that fluctuations in desire are the consequence of reduced psychological continuity. Thus, preferences become inconsistent when FSC is low, causing more self-control failures. Because the temporal perspective of FSC includes a lifespan (Parfit, 1971), the relationship between FSC and time-inconsistent preferences should apply to both myopic and hyperopic self-control problems.

Theoretically, maximum FSC would denote that personal identity remains the same over time. Only then would preferences remain perfectly constant. (Parfit 1971.) Because there would be no time-inconsistency of preferences, self-control failures would not occur, and decisions would be optimal, and thus, truly farsighted. Parfit (1984, 300) argued that people experience regret because they suffer from the constraint of time, due to the finite nature of life. Thus, he suggested that intertemporal decisions would not cause regret if life was infinite. On a smaller scale, Parfit (1971) suggested that the passing of life occurs as changes in personal identity over time. When personal identity changes, preferences change. Thus, maintaining a sense of continuity of identity over time is essential to minimize regret.

Another argument supporting the hypothesis that FSC cannot be excessive is related to the anticipation of regret after a hyperopic decision. Hyperopic preferences can be controlled if long-term regret is considered. Hence, anticipating long-term regret provides the possibility of shifting from excessive farsightedness to true farsightedness and thus, avoiding regret. (Keinan & Kivetz, 2008; Kivetz & Simonson, 2002b.) The ability to anticipate future regret indicates that consumers can distinguish between truly farsighted and hyperopic preferences when considering the benefit of the future self. However, if FSC is low, consumers do not have sufficient motivation to reverse their hyperopic tendencies because they do not perceive their future self as self-relevant enough.

Future consequences become more relevant to the current self when FSC is high (Parfit, 1971). Therefore, FSC should mediate the relationship between hyperopic self-control conflicts and the reversal of hyperopic choices, thereby increasing the self-relevance of truly farsighted preferences and improving the ability to distinguish between hyperopic and truly farsighted preferences by fostering the willingness to avoid hyperopic choices.

The relationship between high FSC and an increased preference for delaying gratification has been well documented empirically. Ersner-Hershfield, Wimmer, et al. (2009) were the first to confirm this relationship. A neuroimaging study revealed that amomng individuals with higher FSC, the brain regions associated with self-referential thinking showed greater activation when thinking about their future self, indicating higher perceived self-relevance of the future self. In addition, these brain activations predicted the temporal discounting rate of future rewards. Individuals with low FSC (i.e., low brain activation) were more likely to choose an immediate reward over a larger, delayed reward.

The findings of Ersner-Hershfield, Wimmer, et al. (2009) have been further explored using more conventional measures. Ersner-Hershfield, Garton, et al. (2009) conducted two laboratory tasks and an experiment to confirm the positive relationship between FSC and the valuation of future rewards. In particular, the experience of similarity with the future self was found to be significantly correlated with the valuation of future rewards. Bartels and Rips (2010) examined the relationship between temporal discounting and FSC using self-reporting questionnaires to measure continuity, leading to similar results. Bartels and Urminsky (2011) provided the first causal evidence for the relationship between FSC and patience to delay rewards, showing that decreasing the sense of continuity led to more impatient choices. Together, these findings indicate that people with higher FSC make more farsighted choices.

FSC has often been determined by measuring the perceived similarity to the future self (Sokol & Serper, 2019). Ersner-Hershfield, Garton, et al. (2009) found that similarity was the most accurate and reliable predictor of delayed gratification. Besides, perceived continuity was found to be a reliable predictor, while perceived caring and liking of the future self did not reliably predict the valuation of future rewards. Consequently, Ersner-Hershfield, Garton, et al. (2009) included only similarity in their validated measure of FSC. Similarly, Bartels and Rips (2010) measured FSC by asking participants to rate their perceived similarity to their future self.

Ersner-Hershfield (2011) demonstrated that not only similarity but also increased vividness and positive affect towards the future self should result in increased delay of gratification. Sokol and Serper (2019) proposed that measuring FSC solely based on similarity may be inadequate, as FSC can be high despite perceiving significant changes in similarity. For example, a strong sense of change might reflect a journey of self-growth.

Instead, having a vivid image of the future self or liking how the future self will be does not necessarily require a sense of similarity, and thus complements similarity as a measure of FSC.

Low FSC is associated with difficulties in making righteous decisions. Hershfield et al. (2012) demonstrated that low FSC predicts unethical behaviour, such as making false promises, cheating, and lying for financial gain. Furthermore, students with low FSC were more likely to fail to fulfil their commitment to participate in a study, despite having made a promise to do so. Conversely, increasing participants' focus on the future self increased the disapproval of unethical behaviour, compared to when generally thinking about the future. Hershfield et al. argued that individuals who experienced higher similarity to their future selves were more likely to consider the long-term consequences of their short-term actions. Similarly, van Gelder et al. (2013) found that involvement in criminal behaviour decreases as the vividness of the future self increases. These results demonstrate the positive impact of FSC on farsighted behavior in terms of virtue and responsibility.

Empirical evidence has demonstrated a negative correlation between FSC and various mental health issues. FSC is negatively correlated with depression, anxiety, suicidality, and stress (Sokol & Serper, 2017; 2020). Furthermore, individuals with lower FSC are more likely to have a decreased subjective quality of life. On the other hand, an increase in FSC increases positive mood and decreases negative mood. FSC provides individuals with a broader perspective on life, decreasing maladaptive cognitive behaviour. (Sokol and Serper, 2020.) Concurrently, there is little evidence of negative impacts of high FSC (Sedikides et al., 2023). Together, these findings indicate that high FSC has a positive overall impact on well-being over time, supporting the view that future self-continuity predicts truly farsighted decision-making.

This section has presented evidence indicating that FSC can be associated with true farsightedness. In light of these findings, the present study proposes that high FSC predicts truly farsighted decisions and therefore negatively predicts hyperopia. The following hypothesis is made to demonstrate the relationship between true farsightedness and hyperopia.

Hypothesis 1: Future self-continuity negatively predicts hyperopia.

4.3 Fragile Self-Esteem as a Positive Predictor of Hyperopia

4.3.1 Introduction

This section (4.3) examines the perspective of organismic integration (OIT) to explain hyperopia and connects this approach to fragile self-esteem. Section 4.3.2 examines how self-regulatory styles impact farsighted behaviour and enjoyment, two central components of hyperopia. Section 4.3.3 provides further inferences about how hyperopia relates to these self-regulatory styles from the perspective of self-esteem as an identity motive, addressing differences in MICT and SDT. Consequently, self-esteem is examined as an underlying motive of hyperopia, which arises when self-esteem is fragile. Hypothesis 2 is proposed at the end of this section.

4.3.2 The Impact of Autonomous Self-Regulation on Truly Farsighted Decision-Making

The self-determination continuum describes different self-regulatory styles of external motivation, in which motivation is directed toward an outcome. (Deci & Ryan, 2000; section (3.4.3). These self-regulatory styles can be more generally distinguished into autonomous (identified and integrated regulation) and controlled regulation (external and introjected regulation), since the two forms of controlled regulation, external and introjected, are highly correlated, and the two forms of autonomous regulation, identified and integrated, are highly correlated (Converse et al., 2019).

Controlled regulation can be characterized as effortful self-control, which refers to the effortful inhibition of impulses, and is used when solving self-control conflicts (Gillebaart, 2018; Milyavskaya et al., 2015; Milyavskaya & Inzlicht, 2017). On the other hand, autonomous self-regulation takes place in the form of automatic or habitual self-regulation processes, and is self-regulation is relatively effortless. For example, choosing an apple for a snack, because one likes it is an effortless self-regulatory process. (Werner & Milyavskaya 2019.)

Controlled regulation is related to difficulties in following through with farsighted goals. Milyavskaya et al. (2015) found that individuals with controlled regulation experienced increased effort but did not report better goal progress. Consequently, they argued that

the experience of stronger and more frequent obstacles among individuals with controlled regulation eliminates the positive relationship between controlled regulation and increased effort. Similarly, Milyavskaya and Inzlicht, (2017) found that effortful self-control only leads to short-term success, while it has no effect on achieving long-term goals. Instead of effortful self-control, goal attainment was influenced by the degree and strength of temptation experienced. Consequently, they suggested that self-regulation is improved not by increasing effortful self-control, but rather by removing temptations in the environment.

Autonomously regulated individuals are less prone to experiencing temptations, which lead to goal-conflicting self-control failures. People with autonomous regulatory styles experience lower and weaker conflicting temptations compared to people with controlled regulatory styles. At the same time, they tend to perceive obstacles to goals as smaller and less frequent compared to individuals with controlled regulatory styles. (Milyavskaya et al., 2015.) For example, Holding et al. (2017) found that students who were autonomously motivated towards their personal goals were less likely to experience action crises. These crises are intrapersonal conflicts concerning the decision between continuing to pursue a goal or disengaging from it (Klinger, 1977 as cited by Holding et al., 2017). Thus, autonomous regulation feels more natural and effortless because motivation is better intrinsically aligned (Werner & Milyavskaya, 2019).

The positive relationship between farsighted goal attainment and autonomous self-regulation can be attributed to the enjoyment of behaviour following relatively intrinsic motives (Werner & Milyavskaya, 2019). Autonomous goals are intrinsically pleasurable (Cantor & Blanton, 1996 as cited by Milyavskaya et al., 2015). Therefore, autonomously motivated individuals perceive goals as more satisfying and are therefore less tempted to be distracted.

Given the relationship between autonomous regulation, enjoyment, and the successful pursuit of farsighted goals, it is likely that hyperopic consumers struggle with the integration of extrinsic motivation. Because enjoyable decisions are often difficult to justify (Okada, 2005), it requires self-determination to follow through with these decisions. Therefore, hyperopic consumers may lack the autonomy to follow through on pleasurable choices and rather stick to decisions that are controlled rather than

autonomous, thus, facing difficulties following through with their truly farsighted preferences.

4.3.3 Fragile Self-Esteem and the Introjected Regulation of Farsighted Preferences

The previous section suggested that hyperopic consumers' self-regulatory styles may be relatively controlled. As discussed in section 3.4.3, two controlled regulatory styles exist: external regulation and introjected regulation (Deci & Ryan, 2000). In contrast to external regulation, introjected regulation has the potential to be mistakenly regarded as self-determined, because regulation is internal rather than external. However, behavior can be internally regulated but controlled when driven by introjects rather than true self-determination. Therefore, introjected regulation is a blind spot when self-regulation is viewed from the perspective of external versus internal regulation. (Soenens & Vansteenkiste, 2011.)

The blind spot of introjected regulation demonstrates the importance of distinguishing between self and personal identity. As discussed in section 2.2.3, the MICT views the self as synonymous with personal identity, whereas the SDT tends to view personal identity as distinct from the self. When the self is defined as synonymous with personal identity, introjected needs cannot be distinguished from internal needs, because self-determined motives cannot be distinguished from introjected motives. In this case, introjected regulation remains unaddressed. (Soenens & Vansteenkiste, 2011, 386.) While the MICT examines what motivates identity construction, SDT emphasizes whether personal identity aligns with the satisfaction of core psychological needs (Soenens & Vansteenkiste, 2011). Hence, the SDT provides a complementary perspective on the identity motives of self-esteem and future self-continuity (FSC).

The identity motives of self-esteem and FSC differ from each other in terms of the satisfaction of core psychological needs. As discussed in section 4.2.2, the level of need satisfaction should positively impact FSC (Di Domenico et al., 2018). Therefore, FSC should predict truly farsighted decisions rather than hyperopic decisions. In contrast, the pursuit of self-esteem interferes with the satisfaction of core psychological needs. Therefore, identity motives of self-esteem may undermine truly farsighted goals.

The pursuit of self-esteem is a quest to satisfy introjects and therefore falls into the category of introjected regulation. Hence, goals motivated to acquire self-esteem are controlled rather than autonomous. Self-esteem, which depends on introjects, is externally contingent and thus fragile. If an individual is not able to live up to his introjected demands, self-worth fluctuates. (Crocker & Park, 2004; Deci & Ryan, 1995, 2000.) According to the SDT, the psychological needs of relatedness, competence, and autonomy are human needs, while self-esteem is a goal that is not needed to satisfy these needs. Instead, behavior that is strongly driven by self-esteem goals is likely to focus on maintaining and receiving validation. (Crocker & Park, 2004; Ryan & Deci, 2017b, 385–395.)

The self-worth of people with contingent self-worth fluctuates when contingencies are not met (Deci & Ryan, 1995). Therefore, self-esteem in introjected regulation is often unstable (Paradise & Kernis, 2002). People with unstable self-esteem are vulnerable to evaluation and act defensively when their sense of self-esteem is threatened (Kernis, 2003). In contrast, secure self-esteem is based on a relatively solid sense of self (Deci & Ryan, 1995; Kernis, 2000; Paradise & Kernis, 2002). Thus, individuals with stable self-esteem have stronger abilities to resist social pressures and regulate behavior more autonomously (Paradise & Kernis, 2002). They have a stronger feeling of purpose in life and tend to engage in activities they truly enjoy (Kernis, 2000). They have clearer goals and stronger beliefs that give life significance (Paradise & Kernis, 2002; Ryff, 1989.) Therefore, it is probable that they make more self-determined and thus, more truly farsighted decisions.

Contingent self-worth influences farsighted preferences by affecting where people direct their energies and invest their time and effort (Crocker & Luhtanen, 2003). For example, someone might construct his occupational identity by satisfying introjects of competition contingent self-worth, competing against peers without reflecting on his intrinsic interests. Indeed, contingent self-worth strongly motivates people to pursue success and avoid failure (Crocker et al., 2006). Hence, self-regulatory behavior is directed towards highly motivating contingencies, making it difficult to recognize the superordinate goal between two seemingly farsighted goals. Thus, distinguishing truly farsighted goals from hyperopic goals may be difficult when self-worth is at stake.

Effective self-regulation depends on a thorough understanding of which objectives are most important and why (Crocker et al., 2006). Self-regulation functions better when self-esteem is secure, because decisions are less motivated by receiving validation and thus more self-determined (Kernis et al., 2000). However, when self-esteem is at stake, people focus on boosting their self-esteem at the cost of missing out on other, more relevant priorities (Crocker et al., 2006). Retrospectively, the decision to boost self-esteem at the cost of the satisfaction of core psychological needs may turn out to be the wrong decision in the long term. Thus, this may lead to feelings of regret and feelings of having missed out. Interestingly, especially hyperopic consumers tend to experience wistful feelings of missing out retrospectively (Kivetz & Keinan, 2006).

The pursuit of self-esteem comes at the cost of self-regulation, as it undermines autonomy and functioning relationships. Emotions that follow the pursuit of self-esteem are hot emotions that can tempt one to deviate from higher-order goals. Accordingly, they suggested that in the short term, the immediate emotional benefits of pursuing self-esteem often outweigh the costs, making the pursuit of self-esteem a tempting option. However, they argued that the costs associated with pursuing self-esteem accumulate gradually. Consequently, in the long term, these costs outweigh the benefits. (Crocker & Park, 2004.) This can lead to feelings of regret in the long run, making hyperopic regret a potential consequence of self-control failures that undermine the satisfaction of core psychological needs. Although consequences take time to accumulate, a truly farsighted consumer would be able to act on behalf of these farsighted consequences.

Some practical examples of the pursuit of hyperopic self-esteem can be found from existing literature. Chang (2020) examined eating disturbances among college students and found that self-worth contingent on appearance and competition increased the motivation for thinness and bulimic symptoms, which are hyperopic psychopathologies (Tangney et al., 2004). Ti and Wei (2023) examined the relationship between academically contingent self-worth and life satisfaction among Chinese college students, finding that highly contingent self-worth was associated with decreased life satisfaction, reflecting the hyperopic focus on academic goals at the expense of well-being. Radenović and Mijatov (2019) found that some marathon runners are willing to run injured to achieve the success of reaching the goal. These runners' self-worth is likely contingent on their competitive success. Park et al. (2017) found that individuals with financially contingent self-worth tended to experience diminished hedonic well-being in the form of

heightened stress and anxiety. Additionally, they experienced less autonomy. When participants experienced a threat to their financially contingent self-worth, they made more hyperopic decisions by avoiding hedonic luxuries.

In this section, introjected regulation was examined in relation to fragile self-esteem with respect to farsighted decision-making. Drawing on existing literature, it is argued that the motive to enhance self-esteem undermines truly farsighted decision-making by shifting the emphasis of decisions on satisfying contingencies of self-worth, instead of satisfying self-determined motives (see Crocker & Park, 2004), leading to increasing regret in the long term. Thus, introjected regulation should drive hyperopic decision-making tendencies. People with fragile self-esteem are likely to establish strategies that support self-aggrandizement and self-protection (Kernis, 2003). Hyperopic goals provide a long-term strategy to compensate for fragile self-esteem at the expense of autonomy and the satisfaction of core psychological needs, and thus, at the expense of truly farsighted decision-making. The following hypothesis is proposed.

Hypothesis 2: Fragile self-esteem positively predicts hyperopia.

4.4 Theoretical model

This conceptual literature review has approached hyperopia from an alternative motivational perspective. Based on the literature review, two hypotheses were proposed to be tested empirically. Hypothesis 1 was proposed to examine the relationship between future self-continuity and hyperopia. Hypothesis 2 was proposed to examine the relationship between fragile self-esteem and hyperopia. This section (4.4) briefly summarises the conceptual approach that leads to the established hypotheses. A theoretical model is illustrated in Figure 3 on page 68.

Research on hyperopia was reviewed to explore assumptions underlying the construct of hyperopia. These assumptions were used to demonstrate the need for a motivational perspective on hyperopia, emphasising conflict-free self-regulation rather than self-control. The assumptions of hyperopia were further explored in terms of how they relate to self-control and, most importantly, to the understanding of what constitutes a farsighted decision.

In this research, the alternative perspective of what constitutes a truly farsighted decision derives from Self-Determination Theory (SDT). The theoretical argument is built upon an eudaimonic understanding of well-being. According to this perspective, the satisfaction of core psychological needs is an indicator of eudaimonic well-being, which the consumer aims to maximize (see Martela, 2023; Ryan et al., 2008, 315).

The motivational perspective of this research relates to personal identity. Whereas the Motivational Identity Construction Theory (MICT) was used to identify motives that influence farsighted preferences, the SDT, and more specifically, the Organismic Integration Theory (OIT), provided a perspective on the internalization of behaviour and identity towards a more integrated way of self-regulatory functioning (see Deci & Ryan, 2000; Pelletier & Rocchi, 2023; Ryan & Deci, 2017b, 179–215). This underlying process of integration of external motivation is referred to as conflict-free self-regulation. A more internalized form of regulation is less likely to undermine the satisfaction of core psychological needs, because behaviour is more autonomous (e.g. Deci & Ryan, 2000). Hence, a more autonomous, more internalized self-regulatory style is better aligned with the satisfaction of core psychological needs, and thus, more truly farsighted.

Future self-continuity was examined from three perspectives: From the perspective of need satisfaction (Di Domenico et al., 2018) as a predictor of farsighted decision-making (e.g. Bartels & Urminsky, 2011; Ersner-Hershfield, Wimmer, et al., 2009; Parfit, 1971), and as an indicator of righteous choice and well-being (e.g. Hershfield, 2019; Sokol & Serper, 2017, 2019; van Gelder et al., 2013). These perspectives provide a theoretical background to support hypothesis 1.

This research assumes that fragile self-esteem is the reason why people pursue self-esteem (Crocker & Park, 2004). Therefore, this approach emphasizes fragile self-esteem rather than the identity motive of self-esteem itself. In the regression analysis, the measures of fragile self-worth can be divided into measures of self-worth contingency (i.e., self-worth contingent on others' approval, competition-contingent self-worth, academically contingent self-worth, and financially contingent self-worth) and self-esteem stability (Altmann & Roth, 2018; Crocker, Luhtanen, et al., 2003; Kernis, 2003; Park et al., 2017). These measures were used as independent variables in the regression model to examine hypothesis 2.

The theoretical argument supporting hypothesis 2 is based on findings that draw on SDT. The controlled regulation vs. autonomous regulation perspective is based on the process of internalization and self-regulatory styles on the internalization continuum (e.g. Werner & Milyavskaya, 2019). The perspective of contingent self-worth and the pursuit of self-esteem aligns with the understanding that the pursuit of self-esteem undermines core psychological needs (Crocker & Park, 2004). Similarly, the perspective of unstable self-esteem emphasizes the perspective of need satisfaction, well-being, and reasons behind the need to form defensive behavioural mechanisms (Crocker et al., 2006; Kernis, 2000; Paradise & Kernis, 2002).

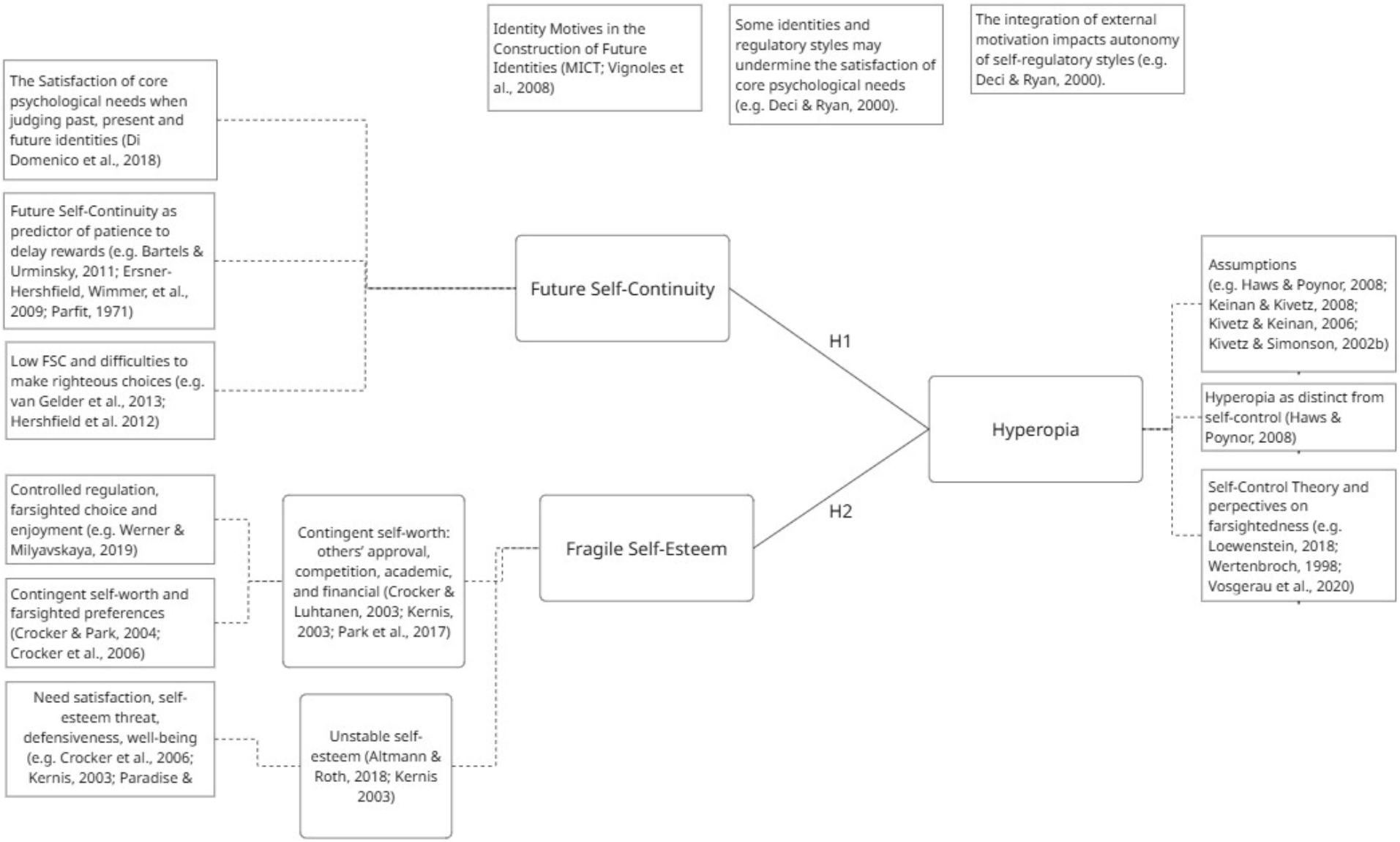

Figure 5. Theoretical model

5 Research Method

5.1 A Mixed-Method Approach – Literature Review and Quantitative Analysis

This research is conducted as an extended literature review combined with a quantitative empirical analysis. Conducting a literature review is an essential part of any research process. However, the level of thoroughness of a literature review varies from an introductory review of the research subject to more synthesizing and conceptual approaches. (Hair, 2016, 89–91; Snyder, 2019.) Due to the thoroughness of the literature review in this research, a methodological approach is employed to maintain accuracy, trustworthiness, and precision. A literature review has the advantage of synthesizing findings and perspectives that could not otherwise be addressed in a single study. This synthesizing approach allows for the discovery of areas that require further research, which provides a foundation for the development of new theoretical frameworks or conceptual models. (Snyder, 2019.)

The methodological approach of the empirical part of this research is quantitative, involving the use of or generation of numerical data through data collection procedures (Saunders et al., 2023, 181–184). Quantitative research systematically applies quantitative properties to measure relationships between variables (Edmonds & Kennedy, 2016, 29–30). Therefore, the focus of quantitative research is on variables and their relationships (Saunders et al., 2023, 181–184). Measurement is conducted using standardized methods to ensure rigor. Quantitative research is usually conducted deductively, testing theoretical assumptions with empirical data, though some inductive approaches exist. Data is often collected from a sample rather than the entire population, utilizing probability sampling techniques to generalize findings. This underscores the importance of distinguishing between a sample, a population, and a target population – a specific subset of the broader population. (Saunders et al., 2023, 181–184, 292.)

Selecting a quantitative research design enables the continuation of academic discourse on the relationship between trait hyperopia and self-control, particularly shaped by Haws and Poynor (2008). Moreover, a quantitative approach enables the standardized measurement of trait hyperopia. The robust theoretical foundation in the field of self-control, self-regulation, intertemporal choice, and motivation provides a basis for

developing hypotheses based on existing conceptualizations, supporting a deductive approach to examining motivational antecedents of hyperopia. The availability of standardized and validated measures, such as measures of FSC and unstable self-esteem, provides a relatively rigorous and structured way to test theoretically developed hypotheses.

The research design is exploratory. Exploratory research is conducted when little is previously known about what is explored. The aim is to explore the unknown, provide data about it, and try to develop or deepen a theoretical understanding of it. Exploratory studies may provide a preliminary basis for whether an area should be further examined in subsequent research. Hence, it is a valuable approach that provides a basis for a new theory. (Hackett, 2019, 24–25.) In this research, an exploratory perspective is adopted by providing an alternative theoretical approach to explain hyperopia. Within the scope of exploratory research, the empirical part of this study is implemented as a pilot study to provide a preliminary understanding of the relationship between hyperopia and measures of fragile self-esteem and FSC.

The literature review follows an integrative research design (Snyder, 2019). The goal of the conceptual, integrative approach is to revise the existing understanding of trait hyperopia by providing a different view on the issue (MacInnis, 2011). The contribution is an alternative theoretical approach that provides an advanced understanding of hyperopia (MacInnis, 2011; Snyder, 2019). The research provides supplementary value to the focal theory of hyperopia by addressing specific shortcomings of the existing focal theory. This shift in perspective usually occurs through the adaptation of an alternative theory. (Jaakkola, 2020.) Existing and new ideas are integrated through a synthesizing approach that weaves together streams of literature and different research perspectives. (Snyder, 2019; Torraco, 2005). This process requires conceptual thinking to identify patterns, relationships, and underlying properties of what is being studied (MacInnis, 2011).

The integrative approach is organized as follows. The focal theory of hyperopia is criticized for its shortcomings, specifically its incoherence (Jaakkola, 2020). The function of the critique is to address the question of how well the literature represents the issue under study (Torraco, 2005). At the same time, the need to provide an alternative perspective and the benefits of the alternative approach are elaborated (MacInnis, 2011).

The critique functions as a basis for developing a new theoretical model that provides a new perspective on the topic (Torraco, 2005). Hence, an alternative conceptualization is constructed based on the criticized shortcomings (Jaakkola, 2020). Conceptualization refers to the process of creating a new model. The process involves identifying key variables and constructs for the research, specifying relationships among variables, developing hypotheses, and creating a conceptual model that visually represents the theoretical approach to the relationships being studied. (Hair, 2016, 141–142). Despite the complexity of the issue and the abundance of concepts related to this research, the research aims to maintain parsimony (Maclnnis, 2011).

The pilot study adopts a correlational perspective to test the alternative conception. A correlational design can be implemented in exploratory research (Hackett, 2019). Correlational research focuses on examining the relationships between variables, assessing their consistency, and making predictions. However, it typically cannot establish causality. (Lunenburg & Irby, 2007, 3.) Therefore, any causal interpretations in this research are based on theoretical arguments rather than empirical verification. Hypotheses are tested by conducting regression analyses. Regression analysis allows for the quantification of the strength and direction of relationships, providing insights into how changes in the independent variable are associated with changes in the dependent variable hyperopia (Lunenburg & Irby, 2007, 3). Moreover, a regression analysis allows the determination of the strength of the relationship between variables (Malhotra, 2016, 532). The research design is cross-sectional, meaning that data is collected at one point in time from a single sample (Edmonds & Kennedy, 2016, 135).

5.2 Participants and Sampling

Simple random sampling was applied as a sampling method. Two categories of sampling methods exist: nonprobability and probability sampling. Probability sampling, which includes simple random sampling, is used specifically in quantitative research. Unlike nonprobability sampling, probability sampling assumes that the probability of selecting each element in the target population is known. Elements of the target population are selected randomly. This allows the statistical generalization of sample results to the target population. (Hair, 2012, 175–177.) Simple random sampling is based on the idea that the probability of selecting each element of the target population is equal. It involves a

random process to select respondents. (Vogt, 2012, 122–124.) Thus, the probability of participating in the survey should be equal for each student in the sampling frame.

Finnish university students were chosen as the target population in this research. Hyperopic decision-making is common among university students. (Kivetz & Keinan, 2006). University students are inclined to make farsighted lifestyle choices as they navigate career and life decisions. Students face decision-making situations related to their career, which are often accompanied by career stress and indecision. Furthermore, career planning entails the process of identifying with one's future professional self. (Z. Zhang et al., 2022.) In Finland, most university students are relatively young. In 2012, the average age of a first-year student at a university in Finland was 25 years old (Official Statistics Finland, 2012). Thus, university students are in the position of facing decisions that may have long-term consequences. Besides, university students face more trivial self-control conflicts, such as what to do during a winter break (Kivetz & Keinan, 2006). Hence, they are a relatively heterogeneous group of people with different kinds of lifestyles, providing a relatively heterogeneous target population for a pilot study. At the same time, university students share a relatively similar lifestyle relating to their academic endeavors, enabling the use of targeted measures of self-worth contingency.

The target population of this research involves all undergraduate-level students from the following faculties of the University of Turku: Faculty of Education, Faculty of Humanities, Faculty of Medicine (only students in general medicine), Faculty of Science, Faculty of Social Sciences (only psychology and speech therapy students), Faculty of Economics (Turku School of Economics), and the Faculty of Technology. The sampling frame comprises 11 234 students, representing 79% of the 15 859 students enrolled at the University of Turku in 2024. Generalizing results involves a risk of bias (see Saunders et al., 2023, 295). Since the function of the pilot study is exploratory in nature, the sample can be viewed as heterogeneous and large enough to represent university students in Finland at the expense of rigor.

The target population was reached through the email distribution channels of the student associations representing each faculty. The students of each faculty subscribe to the email list of their faculty’s student association to read study-related news and information. However, subscribing to the e-mail channel is to some extent voluntary, although recommendable. Therefore, some students may not have subscribed to their faculty's

email list. Not all student associations were able to provide an exact number of students reached. In cases where the number of students reached could not be confirmed, the total number of students studying at the faculty was assumed to correspond to the number of students reached[1]. For example, from the Turku School of Economics, only 871 out of 2 262 students were subscribed to the email list. In contrast, some distribution channels had a higher reach than the total number of students studying at the faculty. For instance, 2 217 students were reached from the Faculty of Education, despite only 2 095 students being enrolled in 2024.

A sum of 441 questionnaire responses was received, out of which 439 were included in the sample. Out of the estimated number of students in the sampling frame, 3.9 percent responded to the questionnaire. Hence, the response rate was relatively low (Holtom et al., 2022). The questionnaire was open for 21 days from 17/04/2024 to 13/05/2024. 84 percent of respondents who started the questionnaire finished the questionnaire. 16 percent of respondents started responding but did not finish the questionnaire. Factors such as participant motivation, survey length, and complexity may have influenced their decision to discontinue (Holtom et al., 2022). Incomplete survey responses were not included in the data.

The basic demographics of the sample were measured. Two responses were deleted because respondents did not represent the target population (post-doctoral students, identified through the open feedback section). Consequently, the final sample consisted of 439 responses, out of which 75.4 percent (n = 331) of respondents were female, 16.9 percent (n = 74) were male, 5.2 percent (n = 23) were non-binary, and 2.5 percent (n = 11) did not disclose their gender. Respondents' ages ranged from 19 to 72 years, with a median of 25 years. 79.3 percent of respondents were below the age of 30, and 92 percent below the age of 40. Respondents were well-distributed across academic years, ranging from 14.1 percent to 19.4 percent per academic year. 14.6 percent of students were 6th-year students or more.

Accurate sampling ensures that the sample is representative of the target population (Hair, 2016, 171–175). Ideally, the sampling frame should include all elements of the target population (Saunders et al., 2023, 195). A selection bias impacts how well the sample represents the target population. (Edmonds & Kennedy, 8–11.) A selection bias occurs

[1] See Appendix 2 for the sampling frame.

when researchers fail to use a systematic assignment method, such as random assignment, to allocate participants to different conditions (Edmonds & Kennedy, 2016, 7).

A selection bias may have occurred during sampling procedures. The difference in the sampling frame and the number of people reached by the distribution channels provided a possibility for selection bias. First, the number of students reached could not be confirmed by all student associations which could lead to some bias between the number of reached students and the estimated number of reached students. Second, a selection bias may have occurred if students who had not subscribed to the email list were effectively excluded from the sampling frame, leading to certain groups having a lower probability of being included. Third, some email distribution channels included individuals other than undergraduate students, such as doctoral students, hobbyists, or administrative personnel. Consequently, the possibility of participation by students other than undergraduates could not be ruled out, although the questionnaire was explicitly directed to students.

The sample size was considered to achieve statistical accuracy (Saunders et al., 2023, 306). Sample size impacts sampling error (Bryman & Bell, 2011, 187–188). Sampling error refers to the error due to random variation in sample composition. The sampling error is eliminated by increasing the sample size. (Edmonds & Kennedy, 2016, 9.) The larger the absolute sample size, the more accurately the findings apply to the target population (Bryman & Bell, 2011, 187–188).

Data gathering procedures created a possibility for non-response bias. The non-response bias occurs when non-respondents differ from respondents in meaningful ways (Saunders et al., 2023). The high representation of female students can only partly be explained by the fields studied in the faculties reached (Official Statistics of Finland, 2018). Hence, females are to some extent overrepresented in the sample, indicating the occurrence of non-response bias. Only Finnish-speaking students could reply to the questionnaire, which is also the prevailing language among university students. Therefore, non-Finnish-speaking students were likely not representative of the target population. Moreover, the distribution of the survey via email provides the possibility of non-response bias, when a common variable, such as gender, systematically characterizes non-respondents (Rea, 2014, 195).

5.3 Questionnaire Design and Instrumentation

Data was collected using an online questionnaire[2] with closed-ended questions. The questionnaire was voluntary and directed to students. Alongside demographic variables, measures of trait hyperopia, future self-continuity, self-esteem stability, and self-worth contingency (others' approval, competition-contingent, academically contingent, financially contingent) were included. Besides, well-being and general self-esteem were measured, and a short intertemporal choice task was conducted. These measures are not relevant to the scope of the study.

Trait hyperopia was measured using the measure of trait hyperopia developed by Haws and Poynor (2008). The hyperopia questionnaire measures hyperopia at an individual level and consists of six statements[3], such as "I often fail to enjoy attractive opportunities" or "It's hard for me to make myself indulge". It is a relative rather than an absolute measure, as it measures the extent of hyperopia among individuals within a chosen population rather than categorizing hyperopic and non-hyperopic consumers. The measure of hyperopia has been validated through confirmatory factor analyses and assessments of discriminant validity with related constructs. The measure has demonstrated reliability through test-retest assessments, showing consistent results over time. (Haws & Poynor, 2008.)

Future self-continuity was measured using the Future Self-Continuity Questionnaire (FSCQ).[4] The FSCQ assesses future self-continuity on three dimensions, measuring perceived similarity, vividness, and liking of the future self in ten years. Compared to other – usually single-item – measures of FSC, the FSCQ has the advantage of capturing the multidimensional nature of FSC, allowing for a more thorough assessment of FSC and a better assessment of questionnaire reliability. The FSCQ has undergone comprehensive validation, and its reliability has been adequately demonstrated, making it a valid and reliable tool for measuring future self-continuity. (Sokol & Serper, 2020.) The first item of the similarity factor was measured in accordance with the future self-continuity scale (FSCS), which is a single-item visual measure depicting overlapping Euler's circles, representing perceived similarity with the future self (Ersner-Hershfield

[2] See the full questionnaire in Appendix 4.
[3] See questionnaire in Appendix 1A.
[4] See questionnaire in Appendix 1B.

et al., 2009). Hence, in contrast to other items of the FSCQ, respondents assessed the first item with visual cues. The FSCS has not been further included in this research.

Self-esteem stability was measured using the Self-Esteem Stability Scale (SESS).[5] Two approaches to measuring self-esteem stability exist, direct and indirect. The indirect approach is considered the "gold standard" of self-esteem stability measures and the more valid approach to measuring self-esteem stability. It is measured by assessing the statistical variability of longitudinal measures of self-esteem. (Altmann–Roth 2018; Chabrol et al. 2006). For example, Kernis et al. (1992, 629) asked participants to respond to the self-esteem scale daily at 10:00 and 22:00 for four days. The statistical variability of the responses indicated the degree of self-esteem stability. The direct approach is a one-off direct assessment of self-esteem stability. Only moderate correlations between the direct and the indirect measures exist. Therefore, direct and indirect self-esteem stability are separate constructs that measure different aspects of self-esteem stability. (Altmann–Roth 2018; Chabrol et al. 2006.)

The SESS is a direct measure of self-esteem stability, which consists of four items. A high SESS score indicates stable self-esteem, whereas a low score indicates unstable self-esteem. The direct approach fits with the cross-sectional research design. In comparison with two other direct measures of self-esteem stability (see Chabrol et al. 2006; Rosenberg 1965), the SESS demonstrates greater validity in predicting indirect self-esteem stability. All three direct measures significantly correlate with each other but show only moderate overall predictive power in predicting indirect self-esteem stability. (Altmann–Roth 2018.)

A combination of items from the Crocker and Luhtanen's (2003) contingencies of Self-worth scale (CSW) and the Financial Contingency of the Self-Woth (FCSW) scale by Park et al. (2017) were chosen to measure self-worth contingency.[6] The CSW scale consists of seven domain-specific subscales. Each subscale measures a different domain of self-worth contingency and consists of five questions. (Crocker & Luhtanen, 2003.) Similarly, the FCSW scale is a subscale of contingent self-worth. It measures the degree to which self-worth is contingent on financial success. Like a CSW subscale, it consists of five items each measuring FCSW. (Park et al. 2017.)

[5] See questionnaire in Appendix 1C.
[6] See questionnaires in Appendix 1D and 1E.

The subscales of the CSW and the FCSW provide sufficient validity and reliability. The CSW has been widely used as a measure of contingent self-worth (e.g. Mandal–Moroń 2021; Schwinger et al. 2017; Ståhlberg et al. 2019; Zhang et al. 2020). Each CSW subscale has demonstrated construct and discriminant validity in measuring the contingency of students' self-worth. Similarly, high test-retest reliability has been found for each subscale and various demographic variables. (Crocker & Luhtanen, 2003). The FCSW has good convergent and discriminant validity, and predictive validity for example related to coping strategies and spending decisions, along with acceptable test-retest reliability (Park et al. 2017).

The subscales of contingency were chosen based on their relevance to the study, as proposed by Crocker and Luhtanen (2003). Because this research focuses on external contingencies, only relatively external contingency domains were included. Therefore, subscales representing relatively internal contingencies were excluded from the questionnaire (family support, God's love, virtue). Of the remaining subscales, the subscale representing the domain of appearance-contingent self-worth was excluded to avoid excessive questionnaire length. The three subscales that were finally included from the CSW are self-worth contingent on others-approval, competition-contingent self-worth, and self-worth contingent on academic competence. The FCSW subscale was included in the questionnaire due to the link between hyperopia and consumer spending discussed by Pan et al. (2019).

Likert-response scales with seven response options were used as the standard for the main constructs (hyperopia, self-esteem stability, and self-worth contingency), except for future self-continuity (FSCQ and FSQS). According to Taherdoost (2019), the seven-point rating scale is the most optimal when considering the number of scale points based on validity and respondents' preferences. Seven numerical options ranging from left to right were complemented with concordant expressions, such as 1 = strongly disagree to 7 = strongly agree. An exception was made for measures of FSC because the FSCQ was developed with 6 response options (Sokol & Serper, 2020). According to Taherdoost (2019), a six-point scale would be the most appropriate option if there's a requirement for respondents to be directed towards one side. Hence, an exception was made to better direct responses.

Pretests of the questionnaire were made to receive feedback on questionnaire clarity, comprehensiveness, and acceptability, and to make necessary improvements. Some procedures were implemented to improve questionnaire clarity. Questionnaire clarity refers to the clearness of questions and response choices for the respondent (Rea 2014, 38). Instructions were provided on how to complete the survey. Related questions were grouped in sections to help respondents focus on specific areas at a time (see Rea 2014, 38). A short introduction was placed at the beginning of each section to provide some context for the upcoming questions. Questions were translated into Finnish to enable responding in the principal native language. Questionnaire acceptability was improved by providing an estimation of the response time. Acceptability refers to potential problems, such as excessive questionnaire length or privacy-insulting questions, that could complicate the acceptance of the questionnaire (Rea 2014, 38). Questionnaire comprehensiveness was increased by including a second, more comprehensive measure of FSC (FSCQ). Additionally, a single-item measure of subjective well-being, a work motive question, and an intertemporal choice task were included.

Ethical considerations were prioritized during the data collection process. A data management plan was established to ensure the responsible use of the data gathered. To minimize privacy risks, university servers were used to store the data. Personal information was collected only for relevant purposes while keeping data privacy concerns in mind. Several measures were implemented to ensure transparency. A privacy statement was provided to participants, informing them about how their data would be used, the types of personal information that would be collected, and their rights related to the data collected. Additionally, the overall purpose of the research and the organization under which it is conducted were disclosed. Participants were given contact information for both the researcher and the research supervisor for any inquiries. Respondents were approached through official channels and were informed that their participation was entirely voluntary.

5.4 Data Analysis

Data was prepared and analysed using IBM SPSS Statistics 29. Data was pre-coded by the questionnaire software and input into the database. Subsequently, the data was edited to ensure its completeness and consistency (Hair, 2016, 317). The data did not contain

missing fields because blank responses were not allowed in the questionnaire. Scores with reversed response values were transformed by reversing the score values.

An exploratory factor analysis was conducted to confirm that indicators of the same measure together form a corresponding factor (Bryman & Bell, 2011, 170). Exploratory factor analysis is a statistical technique used to identify the fewest number of underlying hypothetical constructs. Hence, it identifies underlying structures of measured variables. (Watkins, 2018.) Hence, it can be used to identify the relationship between measured items (Ul Hadia et al., 2016). In this research, the method is used to confirm that indicators of the same measure load together.

The analysis was implemented using the principal component factor model and orthogonal Varimax rotation. The principal component analysis uses the total variation of variables to establish principal components. The goal is to explain as much of the original variance among the variables as possible. Given that the analysis uses items from previously validated scales, it is assumed that both unique and error variances are relatively small, supporting the use of the principal component factor model. (Hair, 2016, 4.) Orthogonal rotation was applied due to the assumption that correlations may exist between extracted factors, such as between different scales of contingent self-worth (Ul Hadia et al., 2016).

Prerequisites for the factor analysis were tested using Bartlett's Test of Sphericity and the KMO test (Kaiser-Meyer-Olkin Measure of Sampling Accuracy; Olkkonen, 2000, 54–65.) Communalities were measured to examine the extent to which factors explain variable variance (Heikkilä, 2014, 232; Olkkonen, 2000, 54–65). The scree-plot was examined to confirm changes in the slope coefficient (Olkkonen, 2000, 54–65). The rotation matrix was examined to eliminate potential cross-loadings (Hair, 2016, 411–423). Subsequently, summed variables were created to represent each measure. For example, all item values of the FCSW-scale were summed to represent financially contingent self-worth. The subscales of future self-continuity (similarity, vividness and and liking) were further summed together to represent the three-factor measure of future self-continuity (Sokol & Serper, 2020).

Theoretically proposed hypotheses were evaluated using linear regression. Hypothesis 1 was tested by conducting a simple linear regression between future self-continuity (IV) and hyperopia (DV). Hypothesis 2 was tested by conducting a multiple linear regression

to predict hyperopia (DV). The following measures of fragile self-esteem were used as independent variables: self-esteem stability, self-worth contingent on others' approval, competition-contingent self-worth, academically contingent self-worth, and financially contingent self-worth.

The regression models were analysed. The probability of type 1 errors was considered. A type 1 error occurs when the null hypothesis is incorrectly rejected despite it being true. The level of significance indicates the probability for a type 1 error. Typically, an acceptable level of significance is $p < 0.05$. (Hair, 2016, 345–346.) Beta coefficients (β_1), representing the slope of the regression line, were examined to evaluate the direction and magnitude of the relationships between variables. Standardized beta coefficients were calculated to account for differences in the scales of the composite scores. (Malhotra, 2016, 532–542.) To determine the extent to which the independent variable explains the variance in the dependent variable, R-squared (R^2) values were analysed (Olkkonen, 2000).The independent variables of the multiple linear regression model were examined for potentially problematic multicollinearity. The variance inflation factor (VIF) was calculated, and the correlation matrix was examined for particularly high correlations. (Hair, 2016; Gareth. James, 2013)

Four fundamental assumptions of linear regression were considered: the relationship between the independent and dependent variable should be linear, the variance of residuals should be constant (homoscedasticity), residuals should be normally distributed around the regression line, and residuals should be independent of other residuals. These assumptions were visually inspected by examining the data distribution of residuals in a histogram and a scatterplot. (Marill, 2004.)

6 Results

6.1 Exploratory Factor Analysis

The preliminary rotated component matrix included all question items of the following nine scales or subscales: hyperopia, future self-similarity (FSC), future self-vividness (FSC), future self-affect (FSC), self-esteem stability, others-contingency, competence-contingency, academic contingency, and financial contingency. One item (HY4: I regret missed opportunities…) was eliminated from the data analysis because of its excessive cross-loading on another component[7]. Factor loadings were sufficiently high and provided no reason to remove additional items from the analysis. (see Hair, 2016, 411–423.) The final rotated component matrix is illustrated in Table 2 on page 83.

The conditions required for conducting a factor analysis were good. The Bartlett's Test of Sphericity showed that sufficient correlation exists between items (*sig. < 0.001*), indicating that the data is suitable for the data analysis. The KMO test indicated that the sample is adequate, demonstrating that the prerequisites for factor analysis were good (KMO = 0.854; see Olkkonen, 2000; Ul Hadia et al., 2016.) Communalities of variables ranged from 0.313 to 0.823, with a median of 0.672 and a mean of 0.654, indicating that the items fit their components relatively well (communalities are presented in Table 2 on page 83). The scree plot showed a clear change in slope coefficient, demonstrating the explanatory power of each main principal component (see Figure 6). As expected, nine

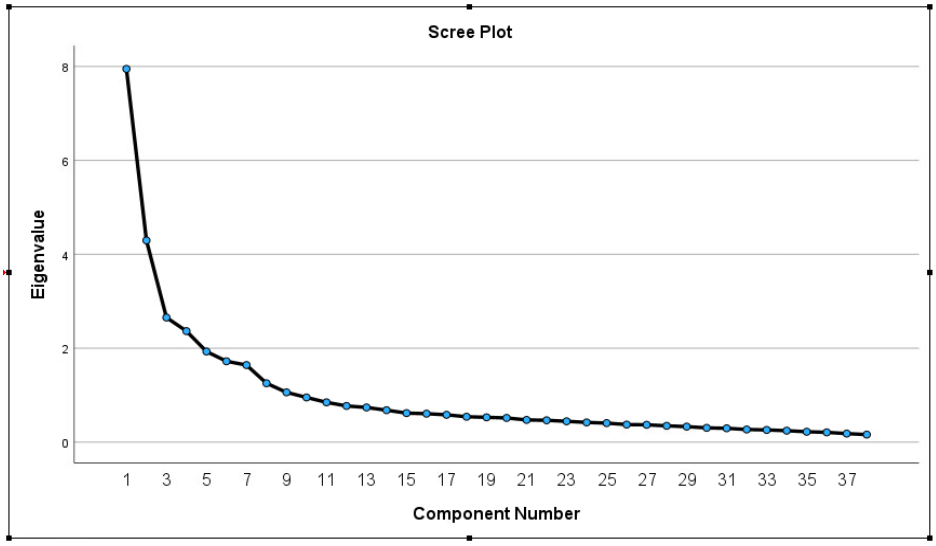

Figure 6. Scree plot

[7] See the preliminary rotation matrix in Appendix 3A.

different principal components were identified from the rotated component matrix with an Eigenvalue above 1, each representing a different scale or subscale (see Table 1). The constructed sum variables are presented in Table 2 on page 83.

Table 1. Total variance explained (full table in Appendix 3B)

	Initial Eigenvalues			Extraction Sums of Squared			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7,948	20,915	20,915	7,948	20,915	20,915	3,356	8,832	8,832
2	4,295	11,303	32,218	4,295	11,303	32,218	3,298	8,678	17,51
3	2,653	6,982	39,2	2,653	6,982	39,2	3,24	8,525	26,035
4	2,363	6,22	45,42	2,363	6,22	45,42	3,107	8,178	34,213
5	1,93	5,078	50,497	1,93	5,078	50,497	2,91	7,659	41,871
6	1,721	4,53	55,027	1,721	4,53	55,027	2,41	6,342	48,214
7	1,641	4,318	59,345	1,641	4,318	59,345	2,344	6,168	54,382
8	1,253	3,298	62,643	1,253	3,298	62,643	2,189	5,76	60,142
9	1,06	2,789	65,432	1,06	2,789	65,432	2,01	5,29	65,432

Table 2. Sum variables, rotated component matrix, and communalities

		Factor Loadings									Communalities
Sum variable	Item name	1	2	3	4	5	6	7	8	9	
Hyperopia (HYPEROPIA)	HY1	0.031	0.014	**0.75**	0.037	-0.007	-0.075	-0.177	0.034	0.037	0.604
	HY2	0.236	0.081	**0.64**	0.057	0.058	-0.13	-0.087	-0.079	0.172	0.539
	HY3	0.085	0.046	**0.803**	0.053	0.069	-0.013	0.023	-0.002	-0.028	0.663
	HY5	0.031	-0.023	**0.733**	0.2	0.134	-0.141	-0.048	-0.015	0.159	0.644
	HY6	0.105	0.048	**0.788**	0.055	0.067	-0.02	-0.148	-0.002	0.12	0.679
Future self-continuity (FSC_TOTAL)	FSC1_SIM_CO	0.035	-0.062	-0.079	-0.09	-0.012	-0.093	0.176	**0.62**	-0.202	0.485
	FSC2_SIM	-0.154	0.056	0.061	-0.062	-0.054	0.081	0.086	**0.74**	0.104	0.61
	FSC3_SIM	-0.013	-0.029	-0.074	-0.025	0.048	0.093	-0.074	**0.762**	-0.137	0.623
	FSC4_SIM	-0.076	0.032	0.049	-0.156	-0.017	0.105	0.12	**0.707**	0.105	0.57
	FSC5_VIV	-0.11	0.013	-0.138	-0.02	-0.005	0.267	**0.784**	0.159	-0.074	0.749
	FSC6_VIV	-0.067	0.05	-0.165	0.038	-0.045	0.201	**0.74**	0.175	-0.106	0.668
	FSC7_VIV	-0.074	0.029	-0.129	0.013	0.067	0.266	**0.708**	0.007	-0.123	0.614
	FSC8_POS	-0.174	0.033	-0.159	-0.003	-0.02	**0.732**	0.409	0.005	-0.101	0.771
	FSC9_POS	-0.192	0.016	-0.093	-0.025	-0.075	**0.831**	0.238	0.146	-0.062	0.823
	FSC10_POS	-0.116	-0.034	-0.148	-0.007	-0.073	**0.826**	0.238	0.09	-0.046	0.79
Self-esteem stability (SESTA_TOTAL)	SESTA1	0.105	0.042	0.047	0.035	0.154	-0.059	-0.011	0.016	**0.759**	0.62
	SESTA2	0.176	0.108	0.273	0.029	0.085	-0.1	-0.141	-0.078	**0.654**	0.589
	SESTA3	0.266	0.107	0.139	-0.027	0.146	-0.027	-0.192	-0.074	**0.702**	0.659
Self-worth Contingent on others approval (CSW_OTH_TOTAL)	CSW1_OT	**0.788**	0.028	0.081	-0.001	0.087	-0.015	-0.139	-0.082	0.147	0.685
	CSW2_OT	**0.763**	0.042	0.141	0.027	0.125	-0.084	-0.077	-0.086	0.217	0.688
	CSW3_OT	**0.74**	0.051	-0.004	0.041	0.176	-0.115	-0.034	-0.032	0.006	0.599
	CSW4_OT	**0.757**	0.194	0.129	0.159	0.025	-0.114	-0.092	-0.029	0.132	0.693
	CSW5_OT	**0.661**	0.183	0.153	0.187	0.059	-0.116	0.073	-0.024	0.049	0.554
Competition-contingent self-worth (CSW_CO_TOTAL)	CSW6_CO	0.116	**0.812**	0	0.056	0.164	0.077	-0.098	-0.014	-0.052	0.721
	CSW7_CO	0.039	**0.771**	0.028	0.024	0.19	0.155	-0.12	0.047	-0.037	0.676
	CSW8_CO	0.123	**0.751**	0.1	0.197	0.137	-0.13	0.213	0.019	0.143	0.729
	CSW9_CO	0.14	**0.683**	0.052	0.204	0.081	-0.171	0.278	-0.028	0.175	0.676
	CSW10_CO	0.101	**0.808**	0.027	0.098	0.189	-0.005	-0.012	-0.026	0.125	0.727
Academically contingent self-worth (CSW_AC_TOTAL)	CSW11_AC	0.009	0.279	-0.032	0.061	**0.794**	0.009	0.061	-0.03	0.005	0.717
	CSW12_AC	-0.015	0.176	-0.031	0.1	**0.825**	0.048	0.069	-0.043	0.027	0.732
	CSW13_AC	0.185	0.101	0.251	0.102	**0.589**	-0.167	-0.089	-0.049	0.26	0.57
	CSW14_AC	0.303	0.05	0.122	0.101	**0.628**	-0.124	-0.056	0.071	0.15	0.56
	CSW15_AC	0.231	0.219	0.203	0.115	**0.726**	-0.023	-0.026	0.014	0.154	0.708
Financially contingent self-worth (CSW_FIN_TOTAL)	CSW16_FIN	0.049	0.094	0.087	**0.839**	0.084	-0.064	0.051	-0.039	-0.06	0.741
	CSW17_FIN	0.065	0.123	0.086	**0.842**	0.04	-0.043	0.041	-0.023	0.025	0.742
	CSW18_FIN	0.09	0.036	0.102	**0.816**	0.078	-0.094	-0.02	-0.081	0.119	0.721
	CSW19_FIN	0.124	0.073	0.065	**0.745**	0.076	0.054	-0.075	-0.117	0.064	0.612
	CSW20_FIN	0.021	0.177	0.029	**0.422**	0.153	0.204	0.051	-0.132	-0.131	0.313

6.2 Hypothesis 1 – Future Self-Continuity as a Predictor of Hyperopia

Hypothesis 1: Future self-continuity negatively predicts hyperopia.

A simple linear regression analysis was conducted to examine the relationship between future self-continuity (FSCQ) and trait hyperopia. The regression model was statistically significant *($p < 0.05$)*, leading to the rejection of the null hypothesis. FSC accounted for 10.6% of the variance in trait hyperopia *($R^2 = 0.106$)*, with an unstandardized regression coefficient of $\beta_1 = -0.306$ and a standardized coefficient of $\beta_1 = -0.325$ (see Figure 7 and Tables 3 and 4). Residual diagnostics indicated that the fundamental assumptions of linear regression were adequately satisfied[8]. These findings confirm hypothesis 1, demonstrating, that FSC is a significant negative predictor of hyperopia.

Figure 7. Regression line

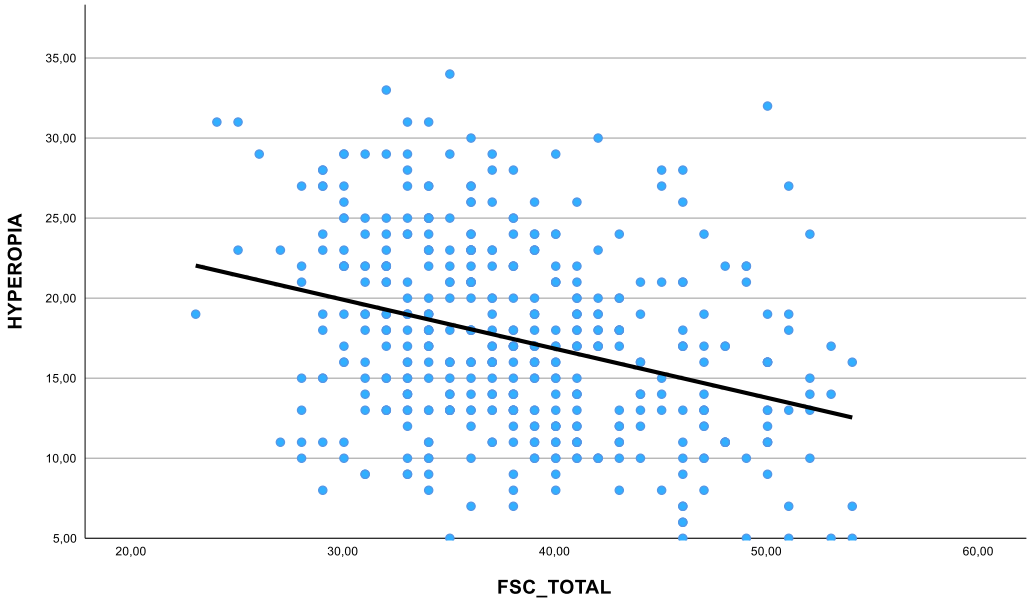

Table 3. Model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.325	0.106	0.104	5.595

Predictors: (Constant), FSC_TOTAL
Dependent Variable: HYPEROPIA

[8] See graphs of residuals in Appendix 3C.

Table 4. Coefficient

Model	Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	29.076	1.649		17.628	<.001
FSC_TOTAL	-0.306	0.043	-0.325	-7.194	<.001

Dependent Variable: HYPEROPIA

6.3 Hypothesis 2 – Fragile Self-Esteem as a Predictor of Hyperopia

Hypothesis 2: Fragile self-esteem positively predicts hyperopia.

A multiple linear regression analysis was performed to predict hyperopia using the following measures of fragile self-esteem as independent variables: self-esteem stability, self-worth contingent on others' approval, competition-contingent self-worth, academically contingent self-worth, and financially contingent self-worth. The results showed that the regression model was statistically significant ($p < 0.001$), with a predictive power of 19.1 percent (adjusted R^2 =19.1). Therefore, the results indicate that fragile self-esteem is a significant predictor of hyperopia.

Table 5. Model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.447	0.200	0.191	5.31681

Predictors: (Constant), CSW_OTH_TOTAL, CSW_CO_TOTAL, CSW_AC_TOTAL, CSW_FIN_TOTAL, SESTA_TOTAL

Dependent Variable: HYPEROPIA

Table 6. ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	3059.691	5	611.938	21.647	<.001
Residual	12240.263	433	28.269		
Total	15299.954	438			

Predictors: (Constant), CSW_OTH_TOTAL, CSW_CO_TOTAL, CSW_AC_TOTAL, CSW_FIN_TOTAL, SESTA_TOTAL

Dependent Variable: HYPEROPIA

While the overall model performed well, competition-contingent self-worth (IV) did not reach a sufficient significance level. Other independent variables showed sufficient statistical significance ($p < 0.05$). The strongest predictor of hyperopia in the model is self-esteem stability, with high statistical significance ($p < 0.01$) and a standardized regression coefficient of $\beta_1 = 0.274$. High scores on the self-esteem stability scale indicate that self-esteem is unstable. Therefore, the positive relationship between self-esteem stability and hyperopia indicates that as self-esteem becomes more unstable, hyperopia increases. Similarly, self-worth contingent on others' approval ($p < 0.05$; standardized $\beta_1 = 0.124$), academically contingent self-worth ($p < 0.05$; standardized $\beta_1 = 0.117$), and financially contingent self-worth ($p = 0.001$; standardized $\beta_1 = 0.150$) positively predicted hyperopia, demonstrating, that among Finnish university students, contingent self-worth positively predicts hyperopia in different domains of contingency, but not in the domain of competition-contingent self-worth. See Table 7 for coefficients.

Table 7. Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Collinearity Statistics	
	B	Std. Error	Beta	t		Tolerance	VIF
(Constant)	4.07	1.437		2.833	0.005		
COMPUTE CSW_OTH_TOTAL	0.125	0.05	0.124	2.479	0.014	0.738	1.355
COMPUTE CSW_CO_TOTAL	-0.052	0.049	-0.053	-1.067	0.287	0.762	1.313
COMPUTE CSW_AC_TOTAL	0.127	0.056	0.117	2.255	0.025	0.687	1.455
COMPUTE CSW_FIN_TOTAL	0.156	0.048	0.15	3.258	0.001	0.873	1.146
SESTA_TOTAL	0.455	0.082	0.274	5.568	<.001	0.764	1.308

Dependent Variable: HYPEROPIA

The requirements for conducting a regression analysis were met. There was no problematic multicollinearity between variables. The VIF values showed low levels of multicollinearity (see Gareth. James, 2013, 101–102). The correlation matrix showed moderate but unproblematic correlations between the independent variables (see Hair, 2016, 399–400). Residual diagnostics and the sample size indicated that the basic assumptions of linear regression were adequately satisfied (see Marill, 2004)[9].

[9]See graphs of residuals in Appendix 3D.

7 Summary, Discussion and Conclusions

7.1 Introduction

The purpose of this Chapter (7) is to summarize the research, discuss the findings, and draw conclusions. Section 7.2 reintroduces the purpose of the study along with a summary of the research structure. The theoretical perspective and findings are discussed in section 7.3 with implications for research question 2. In addition, some limitations are addressed with suggestions for future research. Concluding remarks are presented in section 7.4.

7.2 Research Summary

This research addressed two critical issues identified in hyperopia research: First, the lack of understanding of what drives hyperopic decision-making; second, the dependence of hyperopia research on the limited theoretical perspective of self-control. The research was limited to two motives of identity construction, which were identified with relevance to identity-related farsighted decision-making: self-esteem and future self-continuity (one aspect of self-continuity). The motive for self-esteem was examined by measuring fragile self-esteem. The purpose of this research was to develop and test a motivational approach to explain hyperopia. This was carried out by examining the impact of fragile self-esteem and future self-continuity on hyperopia among Finnish university students. A correlational pilot study was conducted. The data was collected through an online questionnaire addressed to a subset of students attending the University of Turku.

The research was structured as follows. Chapter 1 served as an introduction to the thesis. Chapter 2 presented the key constructs of the study. Chapter 3 introduced the theoretical perspectives relevant to this study (see research question 1). Section 3.2 presented the classical paradigmatic assumptions of hyperopia to identify the underlying assumptions that tie hyperopia to the self-control theory. Section 3.3 introduced the Motivated Identity Construction Theory (MICT), which was used to identify motives that impact farsighted preferences. Section 3.4 introduced the Self-Determination Theory (SDT) and its sub-theory, the Organismic Integration Theory (OIT), to provide a framework that connects motivation and self-regulation. Chapter 4 focused on fragile self-esteem and future self-continuity as predictors of hyperopia. Two hypotheses were established. Section 4.1 distinguished between hyperopia and true farsightedness. Section 4.2 focused on future

self-continuity as a negative predictor of hyperopia (see research questions 2). Section 4.3 focused on fragile self-esteem as a positive predictor of hyperopia (see research questions 3). Section 4.4 introduced the theoretical model. The research methodology was described in Chapter 5. The results of the research hypotheses were presented in Chapter 6. The results and conclusions are further discussed in this Chapter (7).

7.3 Discussion of the Findings

7.3.1 From the Classical Self-Control Perspective to an Alternative Motivational Approach

In this research, the paradigmatic assumptions of hyperopia were addressed, and an alternative approach to understanding hyperopia was proposed. This section (7.3.1) briefly discusses these assumptions and the basis of the alternative motivational approach.

Traditionally, the construct of hyperopia has been defined in relation to self-control. For example, Kivetz & Keinan (2006) defined hyperopia as "overcontrol and excessive farsightedness", indicating that hyperopia is a form of self-control and the opposite of myopia. However, Haws & Poynor (2008) argued that hyperopia is a distinct but related construct to self-control. As a consequence, researchers have increasingly avoided defining hyperopia based on paradigmatic assumptions of self-control, such as the excessive preference for virtue over vice, or the excessive choice of farsighted options over short-sighted options. Instead, definitions of hyperopia that characterize hyperopia as avoiding indulgence have become more common. Thus, hyperopia has been increasingly characterized as avoidant rather than excessive behaviour.

Despite shifts in definition and the contradictory relationship between self-control and hyperopia, the construct of hyperopia has remained dependent on Self-Control Theory. First, defining hyperopia as avoidance of indulgence relies on the underlying assumptions of the hedonic-utilitarian self-control paradigm. In other words, a consumer makes choices between hedonic luxuries and utilitarian necessities. A hyperopic consumer avoids hedonic luxuries in favour of utilitarian necessities and, thus, excessively favours necessities over luxuries. Thus, avoidance and excessive preference are two sides of the same coin. Second, the definition of hyperopia is dependent on the intrapersonal self-

control conflict, which is central to Self-Control Theory. For example, Haws and Poynor (2008) assumed that hyperopic consumers are to some extent aware of their conflicting desires when making hyperopic decisions and can, therefore, anticipate them. Third, the main indicator of hyperopia is regret. Whereas self-control conflicts that lead to regret are often myopic, some self-control conflicts that lead to regret are hyperopic. Thus, regret and the self-control conflict are fundamental elements of Self-Control Theory, that are still present in the conceptualization of hyperopia. Similarly, the hedonic-utilitarian paradigm and the vice-virtue paradigm still exist to some extent in the underlying assumptions of hyperopia.

Despite the dependence of construct hyperopia on paradigmatic assumptions of self-control and the contradicting low relationship between self-control and hyperopia, little emphasis has been put on understanding the specific relationship between hyperopia and self-regulation, including self-control. However, some self-control researchers have provided an evolved perspective to explain hyperopia in terms of self-control, continuing to view hyperopia as a self-control issue, but using a different approach to the paradigms underlying the traditional conceptualization of hyperopia. For example, Vosgerau et al. (2020) characterized hyperopia as a self-control failure, because hyperopic consumers violate superordinate goals.

This research has focused on the key differences between hyperopia and myopia as self-control conflicts. First, while myopic consumers struggle to achieve their farsighted goals, hyperopic consumers struggle to make truly farsighted choices. Second, while myopic self-control failures lead to short-term regret, hyperopic self-control failures lead to long-term regret, which takes time to accumulate (Keinan & Kivetz, 2008). Consequently, myopia is about failing to make short-sighted choices that align with farsighted preferences, whereas hyperopia is about failing to make farsighted choices that align with one's truly farsighted preferences.

The emphasis on farsighted preferences in hyperopia reduces the relevance of self-control (both conflict-related and effortful self-control). Whereas the focus in myopia is on exerting self-control to resist hedonic temptation, the correlation between hyperopia and self-control is small (Haws & Poynor, 2008). The importance of effortful self-control diminishes when following through with farsighted goals. Instead, following through with farsighted goals is related to effortless self-regulation, such as when regulatory behaviour

is autonomous or habitual. (Milyavskaya et al., 2015; Milyavskaya & Inzlicht, 2017.) In the context of hyperopia, self-control is related to solving the intrapersonal conflict rather than antecedents of the conflict, such as motivational factors. The emphasis on farsighted preferences provides reason to examine hyperopia from the broader perspective of self-regulation, including conflict-free and effortless self-regulation.

The Motivational Identity Construction theory (MICT) and the Self-Determination Theory (SDT) differ from each other in terms of their motivational perspective. Whereas the SDT identifies core human needs, that are needed for optimal, psychic functioning, the MICT focuses on motives, that underlie the construction of identity. Hence, these needs may not be necessary for optimal psychic functioning. Instead, they are motives, that come with certain identity elements and thus, impact preferences of identity construction.

Because the SDT and MICT differ in perspective, the identity motives of self-esteem and future self-continuity can be examined from the perspective of self-determination. According to the SDT, identity construction impacts the satisfaction of core psychological needs and vice versa (Luyckx et al., 2009; Ryan & Deci, 2012). Some identities support the satisfaction of autonomy, competence and relatedness, whereas others undermine it. Thus, whereas the MICT can be used to identify motives of identity construction, the SDT perspective can be used to determine to what extent these identity motives satisfy core psychological needs. Hence, both theories can be used together in an integrative approach to explain hyperopia. An essential role of SDT in this research has been to provide an understanding of how the identity motives of self-esteem and future self-continuity relate to the satisfaction of core psychological needs.

7.3.2 The Relationship Between Future Self-Continuity and Hyperopia

The results of the pilot study showed an inverse relationship between hyperopia and future self-continuity (FSC; *standardized* $\beta_1 = -0.325$). FSC predicted 10.6% of the variance in hyperopia. Thus, a more continuous sense of personal identity from the present to the future is related to lower hyperopic tendencies among Finnish university students. In other words, consumers with a higher sense of continuity between current and potential future identities are less likely to have difficulties allowing themselves to indulge, and thus,

more likely to consider the farsighted benefit of joyful experiences; more able to seize the day and enjoy the moment.

Results showed that a lower sense of hyperopia is related to increased hyperopic tendencies. Consumers with low FSC differ from consumers with high FSC in the extent to which they perceive their potential future selves as relevant in decision-making. Individuals with high FSC are likely to less hyperopic choices because they experience the future self as more continuous with the current self and thus, as more self-relevant. Therefore, when FSC is high, the benefit of the future self becomes more relevant to the decision-maker. On the other hand, low FSC indicates that decisions are made with decreasing consideration of the interests of potential future selves. As a result, preferences are more time-inconsistent, increasing the likelihood that decisions are made at the expense of the future self, giving way to feelings of regret over time.

Hyperopic consumers may have difficulties satisfying core psychological needs. The satisfaction of core psychological needs moderates the self-relevance of identity elements of future selves. When core psychological needs are satisfied, consumers can better integrate potential identity elements of the future self into their current identity. (Di Domenico et al., 2018.) Thus, the satisfaction of core psychological needs impacts the level of FSC. When core psychological needs are satisfied, FSC is higher. In contrast, when FSC is low, psychological needs are likely not met. Therefore, it is likely that hyperopia is associated with a weaker satisfaction of core psychological needs.

7.3.3 Fragile Self-Esteem as a Driver of Hyperopic Tendencies

The relationship between fragile self-esteem and hyperopia (DV) was tested by conducting a regression analysis that included independent variables measuring contingencies of self-worth and unstable self-esteem. The domains of self-worth contingent on others' approval, competition-contingent self-worth, academically contingent self-worth, and financially contingent self-worth were included due to their potential relevance to students as well as their relatively external level of contingency. As contingencies vary depending on the domain, measuring overall self-worth contingency can be inaccurate, although people with contingent self-worth often have contingencies in multiple domains. (Crocker, Luhtanen, et al., 2003.) Hence, in this research, the

subscales of self-worth contingency indicate that self-esteem is fragile. However, they are not absolute measures of contingent self-worth. Therefore, the regression model is limited to these specific domains.

The regression analysis showed that among Finnish university students, 19.1 percent of the variation in hyperopia can be explained by fragile self-esteem. Thus, the model demonstrates that fragile self-esteem is a strong predictor of hyperopic decision-making tendencies. Results showed that unstable self-esteem increases tendencies to make hyperopic decisions (*standardized* $\beta_1 = 0.274$, $p < 0.001$). Moreover, results showed that contingencies of self-worth are likely to predict hyperopia. Consumers whose self-worth depends on receiving approval from other people tend to be more hyperopic ($p < 0.05$; *standardized* $\beta_1 = 0.124$), Similarly, consumers whose self-worth is dependent on their academic ($p < 0.05$; *standardized* $\beta_1 = 0.117$) or financial success ($p = 0.001$; *standardized* $\beta_1 = 0.150$) tend to be more hyperopic.

Self-worth contingent on succeeding at competitions did not significantly explain hyperopic decision-making tendencies among university students. No specific reason could be attributed to this finding. However, this relationship is likely dependent on the target population of this research. It is possible that the relationship between competition-contingent self-worth and hyperopia increases in a specific subset of people who have different kinds of hyperopic behavioural patterns, such as semi-professional athletes.

The relationship between unstable self-esteem and unstable self-esteem in the regression analysis indicates that hyperopic consumers' self-esteem is more vulnerable to fluctuations, making them more susceptible to self-esteem threats, such as social evaluation. Consequently, hyperopic consumers are more likely to adopt strategies that protect their self-esteem when it is threatened, leading to an increasing need to maintain and enhance their self-esteem. Therefore, hyperopic consumers have a relatively higher interest in pursuing self-esteem goals when self-esteem is at stake.

The results indicate that farsighted goals that are motivated by the pursuit of self-esteem may come at the expense of truly farsighted preferences. When self-esteem is unstable and easily threatened, defending one’s sense of self-esteem likely becomes a more immediate preference, replacing more truly farsighted preferences. Because achieving self-esteem goals comes with intense emotions, pursuing self-esteem can be highly motivating (Crocker & Park, 2004). Hence, the motive for self-esteem is a relatively

short-sighted, affective goal because its function is to defend one's immediate need for self-esteem rather than one's truly farsighted preferences. In line with the idea that hyperopic goals are affective, future-oriented choices (Loewenstein 2018), self-esteem goals may undermine truly farsighted preferences when self-esteem is at stake.

Contingent self-worth provides an opportunity to tie one's feelings of self-worth to external domains. Hence, striving to meet contingent expectations comes with an opportunity to feel valuable when contingencies are met. Therefore, contingencies of self-worth provide an opportunity to stabilize one's self-worth. Hyperopic consumers use contingencies of self-worth to protect their vulnerable sense of self-worth, stabilizing it by satisfying introjected expectations, which make them feel worthy. (Crocker & Park, 2004; Kernis, 2003.) For example, hyperopic university students' self-worth is relatively tied to satisfying academic expectations. As long as these academic expectations are achieved, their self-worth stays relatively stable. The choice to satisfy these contingencies, such as academic success, may seem farsighted, although they come at the expense of truly farsighted choices.

Hyperopic consumers' avoidance of indulgence can be attributed to the self-regulatory style of introjected regulation, because fragile self-esteem is inherently related to introjected regulation. Contingencies of self-worth function based on introjects. Introjected regulation is driven by the motive to satisfy intrapersonal judgments and evaluations, aiming to satisfy external contingencies. (e.g. Deci & Ryan, 2000.) The positive relationship between contingent self-worth and hyperopia shows that hyperopic consumers' self-regulatory styles are relatively introjected. Introjected regulation is controlled and lacks autonomy. In contrast to controlled regulation, autonomous regulation often feels effortless because it tends to be intrinsically pleasurable. Therefore, consumers with autonomous regulation are less likely to fall for affective temptations and more likely to follow through with farsighted goals. When behaviour is guided by introjects, autonomous preferences, which are often more joyful, tend to be neglected. (Werner & Milyavskaya, 2019.) Results indicate that hyperopic consumers lack intrinsic pleasure because their goals tend to be controlled rather than autonomous. The need to satisfy introjected contingencies contradicts autonomy and self-determination.

A key feature of hyperopia is that regret can be anticipated, meaning that the conflict between intrapersonal preferences already exists at the time of the decision (Haws &

Poynor, 2008; Kivetz & Simonson, 2002b). Introjected regulation involves a conflict between the motive to satisfy self-worth contingencies and the need for autonomy. The need to satisfy contingencies may therefore contradict more self-determined motives, when the feeling of worthiness and thus, self-esteem stability is threatened. While the positive emotions associated with self-esteem goals are intense but short-lived (Crocker & Park, 2004), negative emotions resulting from the lack of satisfying core psychological needs can take time to accumulate. Thus, self-esteem goals may interfere with the satisfaction of core psychological needs and thus, undermine truly farsighted preferences.

Returning to the perspective of consumer lifestyles, such as the Financial Independence Retire Early (FIRE) movement or compulsive marathon running, hyperopia may be a matter of self-regulatory styles. Lifestyles that revolve around the motive of satisfying introjects and self-esteem goals have a high potential to turn into a hyperopic "rat race" because these lifestyles require the constant satisfaction of contingencies rather than autonomous motives. These hyperopic lifestyles may feel exhausting due to effortful self-regulation, which ultimately does not deliver an advantage for farsighted goal progress. Hedonic pleasures that do not satisfy contingencies may be difficult to justify, leading to avoidant tendencies towards indulgence. At the same time, the lack of autonomy and impaired satisfaction of core psychological needs create a need to seek freedom, even though autonomy may provide a sense of freedom that lifestyles such as FIRE often lack.

7.3.4 Hyperopia – Excessive Self-Control or Avoidance of Indulgence?

Hyperopia research has increasingly referred to hyperopia as an avoidant rather than an excessive behaviour. This has likely been a reaction to Haws and Poynor (2008) who found a slightly negative relationship between self-control and hyperopia, indicating that hyperopia does not result from excessive self-control. This research suggests that hyperopia is both an avoidant and an excessive behavioural tendency, which are two sides of the same coin. First, hyperopic consumers have a tendency to avoid pleasurable options they cannot justify. Second, hyperopic consumers' self-regulatory style is relatively controlled, meaning that self-regulation is relatively effortful. This effortful form of self-regulation can become excessive when it hampers the satisfaction of core psychological needs.

The justification of hedonic options becomes difficult when self-esteem is threatened. When self-esteem is threatened, self-esteem goals become more valuable and challenge deliberate, truly farsighted preferences. On the other hand, when self-esteem is secure, enjoyment can more easily be seen as an aspect that contributes to maximum lifetime utility, if indulgence remains deliberate. Difficulties in justifying pleasure are likely to arise when self-regulation is directed towards satisfying introjected beliefs (i.e., introjects, contingencies). When pleasurable preferences contradict introjects, they become difficult to justify. For example, the idea of preparing a delicious Saturday morning brunch of banana pancakes, delicious French cheese, and croissants may contradict introjects, suggesting that spending time on indulgent meals is inefficient and should be replaced with more productive activities.

Hyperopia has been traditionally defined as excessive self-control (Kivetz & Keinan, 2006). However, this view was later questioned by Haws and Poynor (2008). Based on the self-regulatory approach and findings related to fragile self-esteem, hyperopic consumers tend to have relatively more controlled regulatory styles. Hence, self-regulation is more effortful compared to more autonomous regulatory styles. Compared to truly farsighted behaviour, which is self-determined, effortful self-regulation becomes excessive when core psychological needs are not sufficiently met. Therefore, this research argues that hyperopia can be further characterized as an “excessive” behavioural tendency. It is possible that the self-control scale (SCC) used by Haws & Poynor (2008) does not successfully capture these excessive self-regulatory tendencies.

7.3.5 Delimitations and Future Research

This thesis has several delimitations. First, the empirical approach of this research was constrained. Data was gathered from a subset of university students, which does not represent the wider population. Hyperopia was measured as a trait, which was assumed to be relatively constant over time. Besides, the external domain of appearance-contingent self-worth was not included in the questionnaire, even though it is a highly external domain. Second, the research approach involved some delimitations. This research emphasized fragile self-esteem and future self-continuity as underlying predictors of hyperopia. Future research should approach identity motives underlying hyperopia in a broader and more systematic way. Moreover, the perspective of self-continuity could be

broadened by considering present-past continuity, which may have an impact on how one's past self's decision is perceived, and thus, influence findings.

Given the pilot nature of this study, the next phase of this research should further test the relationship between hyperopia, fragile self-esteem, future self-continuity (FSC), and true farsightedness in a series of experimental studies. First, the relationship between need satisfaction and hyperopia should be empirically examined. Second, the relationship between fragile self-esteem and hyperopic choices should be examined by analysing self-worth contingencies associated with hyperopic decisions and by manipulating self-esteem stability within relevant domains of self-worth contingency. Third, the relationship between FSC and hyperopic decision-making should be examined. This perspective could account for more temporal changes in hyperopic preferences, as well as the temporal changes in self-esteem and future self-continuity, potentially providing causal evidence.

Hyperopia could be further examined from the perspective of Self-Discrepancy Theory. For example, Mandel et al. (2017) argued that while compensatory consumption is typically the result of falling short of an ideal self, the opposite is the case when the ideal self falls short of the actual perceived self, which they referred to as positive compensatory consumption. They proposed that consumers, who are more hyperopic than they perceive as ideal, may force themselves to indulge. Positive compensatory consumption could provide an alternative identity-related motivational perspective to understanding hyperopia.

The relationship between hyperopia and self-regulation should be further examined. Changing the perspective on hyperopia from self-control to self-regulation could not directly explain the low correlation between self-control and hyperopia measured by Haws and Poynor (2008), because self-control was measured using the Tangney et al. (2004) self-control scale (SCS), which defines self-control in a broad sense and synonymously with self-regulation. The validity of the SCS has been questioned later by Dang and Jia (2024). However, further understanding is needed to examine whether the SCS is applicable to measuring hyperopic self-control failures, considering the differences in myopia and hyperopia. The relationship between hyperopia and self-regulation could be further addressed from the perspective of hyperopic psychopathologies, such as eating disorders or obsessive-compulsive disorders. For example, Tangney et al. (2004) described two distinct hypotheses about the nature of

"excessive" self-control. First, a widespread perception denotes that hyperopic psychopathologies arise from overcontrol. Alternatively, over-control has been described as a form of misregulation.

The use of Self-Determination Theory in marketing science has been relatively scarce, despite its capability to explain consumer motivation (Gilal et al., 2019). Hyperopia could be further examined in the context of consumer lifestyles, such as the FIRE lifestyle or health and fitness-oriented lifestyles. Hyperopia could potentially address the extent to which lifestyle practitioners have self-regulatory issues that undermine their sense of autonomy and self-determination. Consumer research could benefit from the differentiation between truly farsighted goals and hyperopic goals from the motivational perspective, thereby helping consumers to make more self-determined and satisfying decisions, focusing on what consumers need to live a joyful and fulfilled life, and thus contributing to consumer choices, that are more time-consistent, diminishing unnecessary compensatory behaviours and increasing sustainable, farsighted choices that provide truly farsighted solutions to promote consumers' overall well-being.

7.4 Conclusion

The construct of hyperopia is tied to Self-Control Theory and its paradigmatic assumptions, although hyperopia differs from classical, myopic self-control failures in terms of perspective. This research provides an alternative approach, broadening the perspective of self-control to self-regulation and focusing on fragile self-esteem and future self-continuity as predictors of hyperopia.

Hyperopia is negatively related to future self-continuity among Finnish university students, demonstrating a difference between hyperopic decisions and truly farsighted decisions. While consumers with a higher sense of future self-continuity are likely to perceive the future self as more relevant in decision-making, leading to truly farsighted decisions, the interests of the potential future self become less relevant the more hyperopic a consumer is.

Hyperopic consumers tend to define virtue based on introjects rather than more self-determined preferences, thereby protecting their fragile sense of self-esteem. As a result, self-regulation is directed toward satisfying self-worth contingencies rather than more

intrinsic needs, and more intrinsic needs are neglected. The focus on introjects undermines feelings of pleasure related to autonomous self-regulation. Moreover, indulgences are more difficult to justify when one's worth is dependent on satisfying contingencies. Hyperopic lifestyles may paradoxically seek freedom and autonomy through an effortful, disciplined focus on introjects, which may come at the expense of pleasure related to autonomous self-regulation, undermining the satisfaction of core psychological needs, and increasing the potential of long-term regret.

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Appendix 1A: Trait Hyperopia Measure

An introductory text was provided to provide context for the hyperopia-related section of the questionnaire.

”Tässä osuudessa mitataan suhtautumistasi nautintoon. Nautintoa tuovat esimerkiksi asiat, jotka eivät ole välttämättömiä, mutta joista voisit kuvitella pitäväsi, tai joita tekisit meluisasti. Liiallinen antautuminen omille haluille voi ilmetä esimerkiksi siten, että teet heräteostoksia, joita kadut jälkeenpäin. Toisaalta, jos itselleen ei salli nautintoa, elämästä ja sen tuomista iloista ei pysty ottamaan kaikkea irti. Sekin voi jälkeenpäin kaduttaa.”

Translation: This section measures your attitude towards pleasure. Enjoyment includes things that are not necessary but that you could imagine liking, or that you would enjoy doing. Excessive indulgence in your desires can manifest itself, for example, in making impulse purchases that you regret afterwards. On the other hand, if you don't allow yourself pleasure, you can't get the most out of life and the pleasures it brings. That can also be regretted afterwards.

Name	Original scale (Haws & Poynor, 2008)	Applied translation (Finnish)
HY1	I rarely enjoy the luxuries life has to offer.	Kykenen harvoin nauttimaan elämän tarjoamista ylellisyyksistä.
HY2	“Seizing the day” is difficult for me.	Minun on vaikea elää hetkessä.
HY3	I have difficulty pampering myself.	Minun on vaikea hemmotella itseäni.
HY4	I regret missed opportunities to enjoy rich experiences in the past. (excluded from the analysis based on factor cross loadings)	Kadun menetettyjä, rikastavia kokemuksia ja mahdollisuuksia, joihin en ole tarttunut (excluded from the analysis based on factor cross-loadings)
HY5	It’s hard for me to make myself indulge.	Minun on vaikea sallia itselleni nautintoa.
HY6	I often fail to enjoy attractive opportunities.	En useinkaan pysty nauttimaan houkuttelevista mahdollisuuksista.

Appendix 1B: Future Self-Continuity Questionnaire (FSCQ)

Name	Original scale (Haws & Poynor, 2008)	Applied translation (Finnish)
FSC1_SIM_CON2_TEN	How similar are you now to what you will be like 10 years from now?*	Kuinka samanlainen olet nyt verrattuna siihen, millainen olet 10 vuoden kuluttua?
FSC2_SIM	How similar are your beliefs now to what they will be like 10 years from now?	Kuinka samanlaisia uskomuksesi ovat nyt verrattuna siihen, millaisia ne ovat 10 vuoden kuluttua?
FSC3_SIM	How similar is your personality now that it will be like 10 years from now?	Kuinka samanlainen persoonallisuutesi on nyt verrattuna siihen, millainen se on 10 vuoden kuluttua?
FSC4_SIM	How similar are your values now to what they will be like 10 years from now?	Kuinka samanlaisia arvosi ovat nyt verrattuna siihen, millaisia ne ovat 10 vuoden kuluttua?
FSC5_VIV	How vividly can you imagine what you will be like in 10 years from now?	Kuinka elävästi voit kuvitella, millainen olet 10 vuoden kuluttua?
FSC6_VIV	How vividly can you imagine what you will look like in 10 years from now?	Kuinka elävästi voit kuvitella, miltä näytät 10 vuoden kuluttua?
FSC7_VIV	How vividly can you imagine what your family relationships will be like in 10 years from now?	Kuinka elävästi voit kuvitella, millaiset perhesuhteesi ovat 10 vuoden kuluttua?
FSC8_POS	Do you like what you will be like 10 years from now?	Pidätkö siitä, millainen tulet olemaan 10 vuoden kuluttua?
FSC9_POS	Do you like what your personality will probably be like 10 years from now?	Pidätkö siitä, millainen persoonallisuutesi todennäköisesti on 10 vuoden kuluttua?
FSC10_POS	Do you like what your actions will probably be like 10 years from now?	Pidätkö siitä, millaisia toimintatapasi todennäköisesti ovat 10 vuoden kuluttua?

*This question was presented with visual Euler circles and a written que (to align with the FSCS): “Pohdi kysymystä ajattelemalla ominaisuuksia, jotka tekevät sinusta sen, kuka olet. Näitä ominaisuuksia voivat olla esimerkiksi persoonallisuus, temperamentti, mieltymykset, vastenmielisyydet, uskomukset, arvot, tavoitteet, päämäärät ja ihanteet.” Translation: "Consider the question by thinking about the qualities that make you who you are. These qualities may include personality, temperament, preferences, dislikes, beliefs, values, goals, aims and ideals."

Appendix 1C: Self-Esteem Stability Scale (SESS)

Name	Original scale (Altmann & Roth, 2018)	Applied translation (Finnish)
SESTA1	How I estimate my abilities compared with others changes frequently.	Se, miten arvioin kykyjäni muihin verrattuna, vaihtelee paljon.
SESTA2	My positive and negative feelings toward myself often blend into each other.	Positiiviset ja negatiiviset tunteet itseäni kohtaan sekoittuvat usein toisiinsa.
SESTA3	My attitude toward myself is very stable. (reversed score)	Suhtautumiseni itseäni kohtaan ei vaihtele paljoakaan.

Appendix 1D: Contingencies of Self-Worth Scale (CSWS)

Name	Original scale (Crocker, Luhtanen, et al., 2003)	Applied translation (Finnish)
	Contingency on Others' approval	
CSW1_OT	I don't care what other people think of me. (reversed scoring)	En välitä siitä, mitä muut ajattelevat minusta.
CSW2_OT	What others think of me has no effect on what I think about myself. (reversed scoring)	Sillä, mitä muut ajattelevat minusta, ei ole vaikutusta siihen, mitä ajattelen itsestäni.
CSW3_OT	I don't care if other people have a negative opinion about me. (reversed scoring)	Minua ei haittaa, jos muut suhtautuvat minuun negatiivisesti.
CSW4_OT	My self-esteem depends on the opinions others hold of me.	Itsetuntoni on riippuvainen siitä, mitä mieltä muut ovat minusta.
CSW5_OT	I can't respect myself if others don't respect me.	En voi kunnioittaa itseäni, jos muut eivät kunnioita minua.
	Competition-Contingency	
CSW6_CO	Doing better than others gives me a sense of self-respect.	Se, että pärjään paremmin kuin muut, kasvattaa itsekunnioitustani.
CSW7_CO	Knowing that I am better than others on a task raises my self-esteem.	Tieto siitä, että olen muita parempi jossakin tehtävässä, nostaa itsetuntoani.
CSW8_CO	My self-worth is affected by how well I do when I am competing with others.	Siihen, kuinka paljon arvostan itseäni, vaikuttaa se, kuinka hyvin pärjään muiden kanssa kilpaillessani.
CSW9_CO	My self-worth is influenced by how well I do on competitive tasks.	Siihen, kuinka paljon arvostan itseäni, vaikuttaa se, kuinka hyvin pärjään kilpailullisissa tehtävissä.
CSW10_CO	I feel worthwhile when I perform better than others on a task or skill.	Arvostan itseäni enemmän, kun suoriudun paremmin kuin muut jossakin tehtävässä tai taidossa.
	Contingency on Academic Competence	
CSW11_AC	I feel better about myself when I know I'm doing well academically.	Minulla on parempi tunne itsestäni, kun tiedän pärjääväni hyvin akateemisesti.
CSW12_AC	Doing well in school gives me a sense of self-respect.	Hyvin suoriutuminen opinnoissani tuo minulle itsekunnioitusta.

CSW13_AC	I feel bad about myself whenever my academic performance is lacking.	Tunnen itseni huonoksi aina kun akateeminen suoritukseni on puutteellinen.
CSW14_AC	My opinion about myself isn't tied to how well I do in school. (reversed scoring)	Mielipiteeni itsestäni ei ole sidoksissa siihen, miten hyvin pärjään opinnoissa.
CSW15_AC	My self-esteem is influenced by my academic performance.	Itsetuntooni vaikuttaa akateeminen suoriutumiseni.

Appendix 1E: Financially Contingent Self-Worth Scale (FCSW)

Name	Original scale (Park et al., 2017)	Applied translation (Finnish)
CSW16_FIN	My self-esteem is influenced by how much money I make.	Itsetuntooni vaikuttaa se, kuinka paljon rahaa ansaitsen.
CSW17_FIN	My self-esteem depends on having a lot of money.	Itsetuntoni riippuu siitä, onko minulla paljon rahaa.
CSW18_FIN	I feel bad about myself when I feel like I don't make enough money.	Tunnen itseni huonoksi, kun en ansaitse mielestäni tarpeeksi rahaa.
CSW19_FIN	My opinion of myself isn't tied to how much money I make. (reversed scoring)	Mielipiteeni itsestäni ei ole sidoksissa siihen, kuinka paljon rahaa ansaitsen. (käänt.)
CSW20_FIN	I feel better about myself when I am on top of my finances.	Tunnen itseni paremmaksi, kun pidän talousasiani hallinnassa.

Appendix 2: Sampling Frame

Faculties	Students Reached	Students in 2024
Faculty of Education	2 217	2 095
Faculty of Humanities	(2 451)	2 451
Faculty of Medicine (only students in general medicine)	(956)	956
Faculty of Science	(1 807)	1 807
Faculty of Social Sciences (only psychology and speech therapy students)	(400)	400
Faculty of Economics (Turku School of Economics)	871	2,262
Faculty of Technology	(2 532)	2 532
Total	11 234	12 503

The estimated number of students reached is written in parentheses. The estimated number equals the total number of students studying at the faculty or department(s).

Appendix 3A: Preliminary Rotated Component Matrix (Factor Analysis)

Item name	1	2	3	4	5	6	7	8	9
HY1	-0.032	0.011	**0.749**	0.034	-0.003	-0.079	-0.172	0.052	0.033
HY2	-0.234	0.077	**0.635**	0.054	0.059	-0.131	-0.081	0.195	-0.079
HY3	-0.086	0.045	**0.804**	0.052	0.072	-0.015	0.025	-0.012	-0.003
HY4	-0.068	0.109	0.245	0.134	0.002	-0.019	-0.145	**0.452**	-0.011
HY5	-0.026	-0.026	**0.725**	0.2	0.132	-0.139	-0.045	0.195	-0.013
HY6	-0.102	0.045	**0.783**	0.053	0.067	-0.02	-0.144	0.153	-0.001
FSC1_SIM_CON2_TEN	-0.039	-0.059	-0.069	-0.09	-0.01	-0.096	0.174	-0.227	**0.618**
FSC2_SIM	0.158	0.054	0.055	-0.061	-0.057	0.085	0.087	0.119	**0.742**
FSC3_SIM	0.009	-0.028	-0.069	-0.025	0.05	0.089	-0.074	-0.153	**0.76**
FSC4_SIM	0.077	0.03	0.043	-0.157	-0.017	0.106	0.123	0.104	**0.708**
FSC5_VIV	0.11	0.015	-0.135	-0.018	-0.006	0.272	**0.78**	-0.092	0.159
FSC6_VIV	0.067	0.052	-0.162	0.04	-0.046	0.206	**0.735**	-0.122	0.175
FSC7_VIV	0.072	0.031	-0.124	0.015	0.068	0.269	**0.703**	-0.146	0.006
FSC8_POS	0.173	0.035	-0.157	-0.003	-0.02	**0.734**	0.404	-0.114	0.004
FSC9_POS	0.192	0.017	-0.092	-0.025	-0.077	**0.833**	0.233	-0.064	0.146
FSC10_POS	0.111	-0.035	-0.148	-0.01	-0.068	**0.823**	0.237	-0.069	0.088
SESTA1	-0.108	0.028	0.022	0.018	0.168	-0.069	0.016	**0.736**	0.014
SESTA2	-0.177	0.096	0.251	0.016	0.094	-0.107	-0.119	**0.653**	-0.079
SESTA3	0.272	-0.093	-0.116	0.045	-0.161	0.04	0.166	**-0.676**	0.077
CSW1_OT	**0.784**	-0.028	-0.078	0	-0.084	0.013	0.139	-0.168	0.08
CSW2_OT	**0.762**	-0.039	-0.135	-0.025	-0.126	0.084	0.072	-0.228	0.085
CSW3_OT	**0.74**	-0.053	0.002	-0.043	-0.175	0.115	0.036	-0.011	0.031
CSW4_OT	**-0.753**	0.193	0.126	0.16	0.022	-0.111	-0.092	0.159	-0.026
CSW5_OT	**-0.662**	0.183	0.153	0.185	0.062	-0.118	0.075	0.049	-0.024
CSW6_CO	-0.115	**0.813**	0.003	0.056	0.163	0.076	-0.099	-0.039	-0.014
CSW7_CO	-0.035	**0.773**	0.03	0.026	0.184	0.158	-0.124	-0.007	0.049
CSW8_CO	-0.123	**0.748**	0.096	0.194	0.138	-0.131	0.218	0.151	0.019
CSW9_CO	-0.141	**0.68**	0.048	0.199	0.085	-0.173	0.286	0.173	-0.029
CSW10_CO	-0.101	**0.806**	0.023	0.095	0.191	-0.007	-0.007	0.133	-0.026
CSW11_AC	-0.007	0.28	-0.03	0.062	**0.792**	0.011	0.058	0.006	-0.029
CSW12_AC	0.018	0.178	-0.031	0.102	**0.822**	0.051	0.065	0.032	-0.042
CSW13_AC	-0.184	0.097	0.243	0.098	**0.591**	-0.168	-0.083	0.267	-0.049
CSW14_AC	0.303	-0.048	-0.118	-0.099	**-0.63**	0.125	0.053	-0.149	-0.071
CSW15_AC	-0.229	0.217	0.199	0.115	**0.725**	-0.021	-0.025	0.168	0.015
CSW16_FIN	-0.046	0.095	0.087	**0.841**	0.081	-0.061	0.048	-0.037	-0.038
CSW17_FIN	-0.063	0.123	0.084	**0.842**	0.039	-0.041	0.041	0.046	-0.023
CSW18_FIN	-0.09	0.034	0.098	**0.813**	0.08	-0.095	-0.015	0.132	-0.081
CSW19_FIN	0.125	-0.071	-0.061	**-0.743**	-0.078	-0.053	0.072	-0.073	0.118
CSW20_FIN	-0.026	0.179	0.036	**0.42**	0.157	0.198	0.052	-0.144	-0.136

Note that SESTA3, CSW4_OT, CSW5_OT, CSW14_AC, and CSW19_FIN are reversed scores.

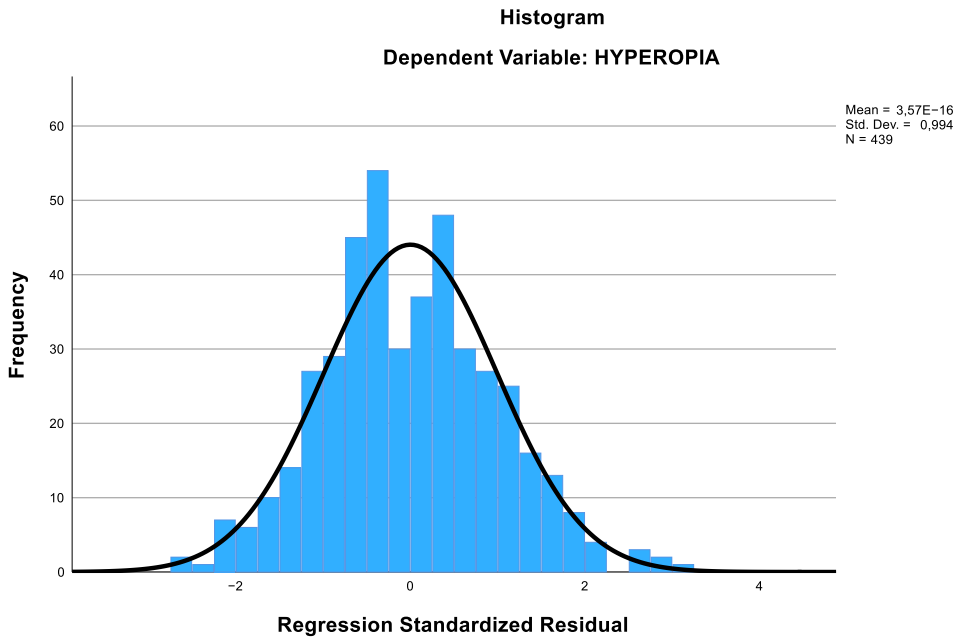
Appendix 3B: Total Variance Explained (Factor Analysis)

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.948	20.915	20.915	7.948	20.915	20.915	3.356	8.832	8.832
2	4.295	11.303	32.218	4.295	11.303	32.218	3.298	8.678	17.51
3	2.653	6.982	39.2	2.653	6.982	39.2	3.24	8.525	26.035
4	2.363	6.22	45.42	2.363	6.22	45.42	3.107	8.178	34.213
5	1.93	5.078	50.497	1.93	5.078	50.497	2.91	7.659	41.871
6	1.721	4.53	55.027	1.721	4.53	55.027	2.41	6.342	48.214
7	1.641	4.318	59.345	1.641	4.318	59.345	2.344	6.168	54.382
8	1.253	3.298	62.643	1.253	3.298	62.643	2.189	5.76	60.142
9	1.06	2.789	65.432	1.06	2.789	65.432	2.01	5.29	65.432
10	0.951	2.503	67.935						
11	0.847	2.229	70.164						
12	0.77	2.026	72.19						
13	0.738	1.943	74.133						
14	0.68	1.789	75.921						
15	0.618	1.625	77.547						
16	0.605	1.593	79.14						
17	0.581	1.53	80.67						
18	0.54	1.422	82.091						
19	0.528	1.389	83.481						
20	0.514	1.354	84.835						
21	0.473	1.244	86.078						
22	0.464	1.222	87.301						
23	0.443	1.166	88.467						
24	0.419	1.104	89.571						
25	0.405	1.066	90.636						
26	0.374	0.983	91.619						
27	0.369	0.97	92.589						
28	0.347	0.912	93.502						
29	0.33	0.868	94.37						
30	0.303	0.798	95.168						
31	0.294	0.774	95.942						
32	0.269	0.707	96.65						
33	0.259	0.682	97.332						
34	0.244	0.641	97.973						
35	0.221	0.581	98.554						
36	0.208	0.547	99.101						
37	0.181	0.477	99.578						
38	0.16	0.422	100						

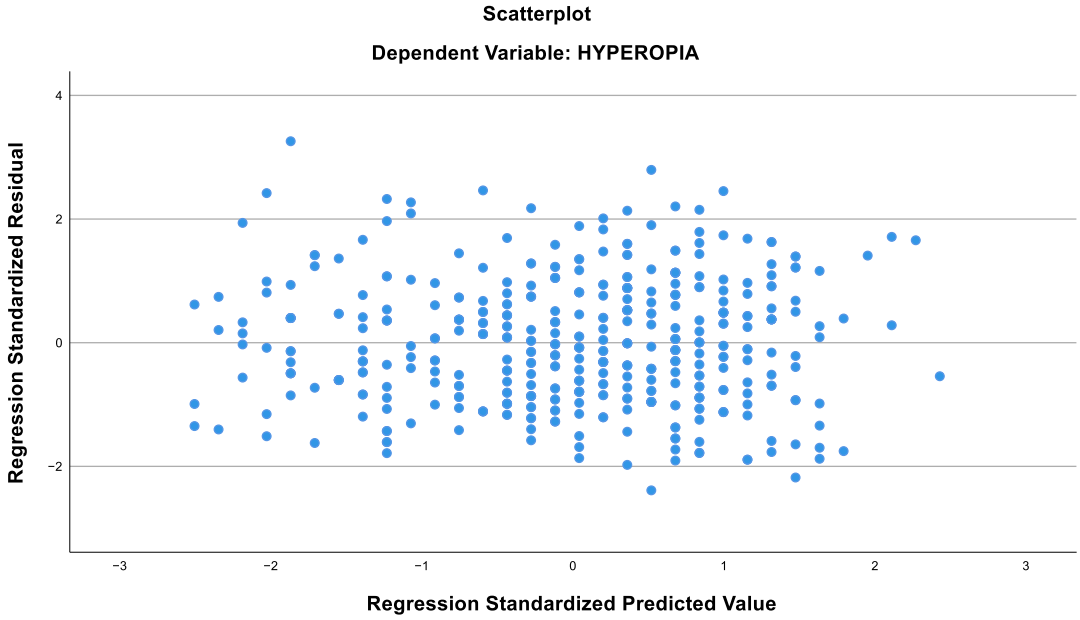
Appendix 3C: Residual Graphs – Regression 1

Regression: IV: Future self-continuity, DV: Hyperopia

Histogram



Scatter plot

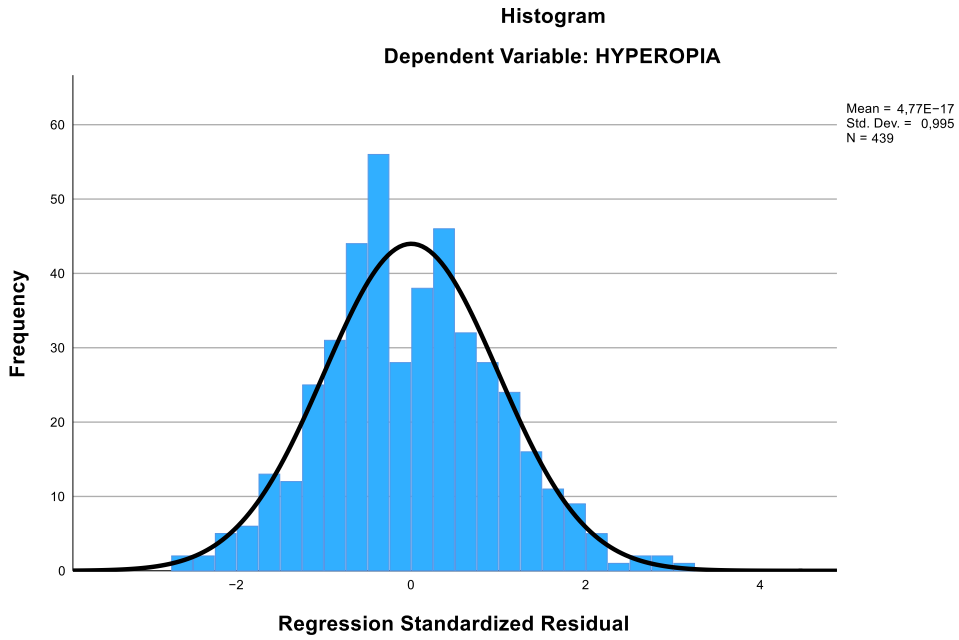


Appendix 3D: Residual Graphs – Regression 2

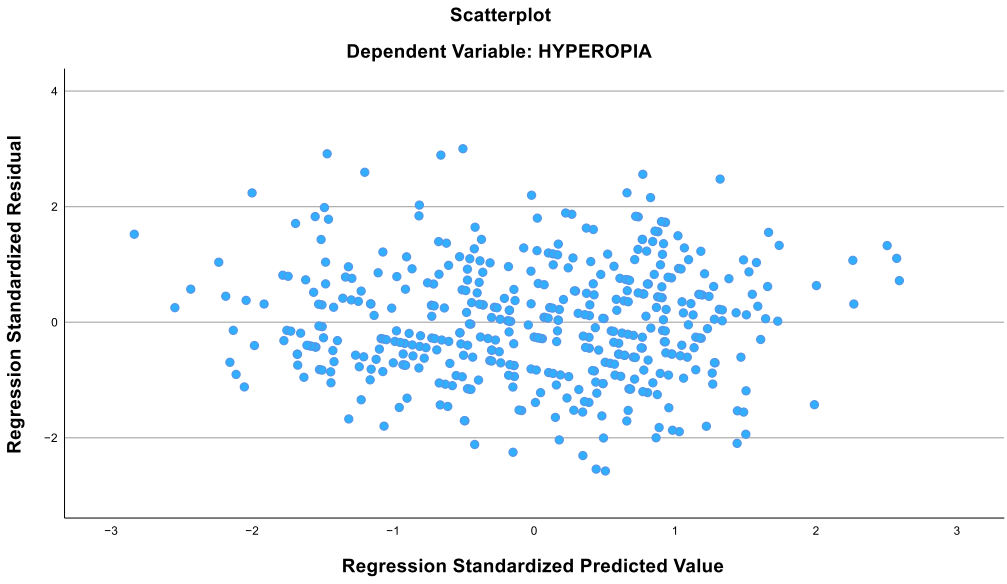
Regression:

IV: self-esteem stability, self-worth contingent on others' approval, competition-contingent self-worth, academically contingent self-worth, and financially contingent self-worth; DV: Hyperopia

Histogram



Scatter plot



Appendix 4: Full Questionnaire

(Please note that some formatting issues have occurred due to printing the questionnaire from its original electronic format.)

Tervetuloa vastaamaan kuluttamista koskevaan kyselyyn!

Pakolliset kysymykset merkitty tähdellä (*)

Arvoisa osallistuja,

tervetuloa kuluttamista koskevaan kyselyyn!

Kysely on osa maisterintutkielmaa, jossa tutkitaan kuluttajien taipumusta sallia itselleen nautintoa ja tämän taipumuksen yhteyttä itsetuntoon. Tutkielma toteutetaan Turun Kauppakorkeakoululle ja aineistoa kerätään ainoastaan tieteelliseen tarkoitukseen. Kysely on suomeksi ja se on vapaaehtoinen.

Kyselylomake on jaettu viiteen osuuteen. Sen täyttämiseen menee arviolta noin 10-15 minuuttia. Voit osallistua tutkimukseen, mikäli olet opiskelija.

Lähettämällä kyselylomakkeen annat suostumuksesi osallistua tutkimukseen. Kerättäviä henkilötietoja ovat ainoastaan ikä, sukupuoli, tiedekunta ja vuosikurssi. Voit tarkistaa tutkimukseen liittyvät yksityiskohdat allaolevista linkeistä:

Tietosuojaseloste:
https://seafile.utu.fi/f/9b17fd11bcf343d6a028/

Tiedote tutkimuksesta:
https://seafile.utu.fi/f/7cad013d9de742e59a9d/

Jos sinulla herää kysymyksiä, otathan yhteyttä minuun tai tarvittaessa graduohjaajaani.

Sydämelliset kiitokset osallistumisestasi!

1. Taustatiedot

1. Ikä *

2. Sukupuoli *

- Nainen
- Mies
- Muunsukupuoleinen
- En halua kertoa

3. Vuosikurssi *

- Ensimmäinen
- Toinen
- Kolmas
- Neljäs
- Viides
- Kuudes tai enemmän

4. Oletko tehnyt opintojen ohella töitä viimeisen 6 kk aikana? *

- Kyllä
- En

Kysymyksen säännöt

Oletko tehnyt opintojen ohella töitä viimeisen 6 kk aikana?

Kyllä

Sääntö: Näytä kysymyksiä

Jos vaihtoehto on valittu Näytä kysymyksiä Mikä motivoi sinua ensisijaisesti tekemään töitä opintojen ohella?

En

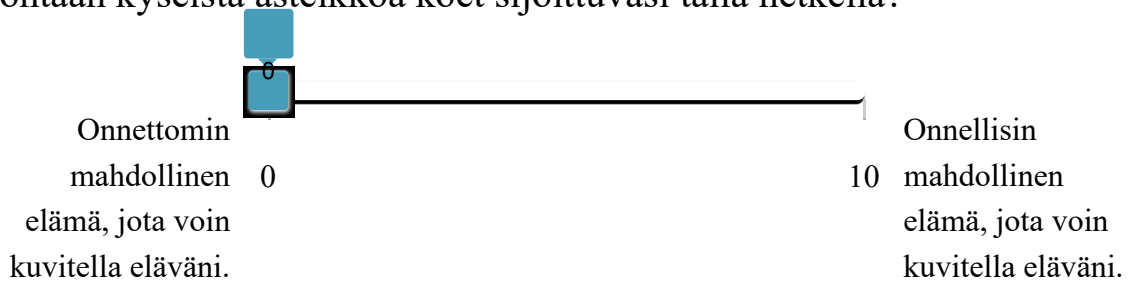
Ei vaihtoehdon sääntöjä

2. Onnellisuus

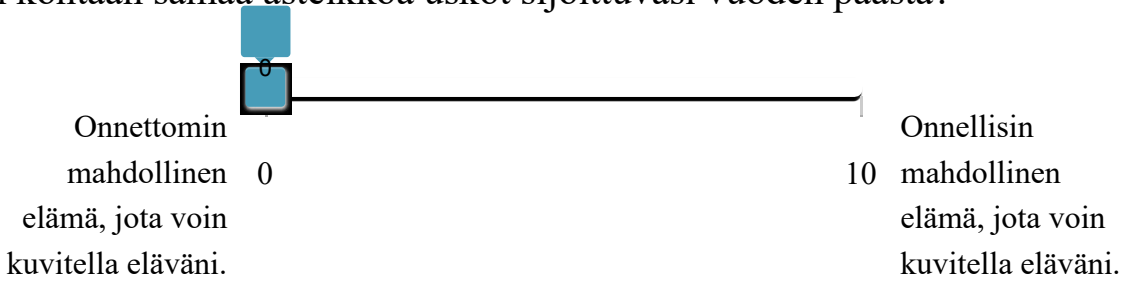
Tässä osiossa esitetään onnellisuutta koskeva asteikko ja sitä koskevia kysymyksiä.

6. Asteikolla 0-10 suurin arvo (10) edustaa onnellisinta elämää ja pienin arvo (0) onnettominta elämää, jota voit kuvitella eläväsi.

Mihin kohtaan kyseistä asteikkoa koet sijoittuvasi tällä hetkellä?



7. Mihin kohtaan samaa asteikkoa uskot sijoittuvasi vuoden päästä?



8. Mihin kohtaan samaa asteikkoa uskot sijoittuvasi 10 vuoden päästä?

Onnettomin mahdollinen elämä, jota voin kuvitella eläväni.

Onnellisin mahdollinen elämä, jota voin kuvitella eläväni.

3. Suhtautuminen nautintoon

Tässä osuudessa mitataan suhtautumistasi nautintoon. Nautintoa tuovat esimerkiksi asiat, jotka eivät ole välttämättömiä, mutta joista voisit kuvitella pitäväsi, tai joita tekisit meluisasti. Liiallinen antautuminen omille haluille voi ilmetä esimerkiksi siten, että teet heräteostoksia, joita kadut jälkeenpäin. T oisaalta, jos itselleen ei salli nautintoa, elämästä ja sen tuomista iloista ei pysty ottamaan kaikkea irti. Sekin voi jälkeenpäin kaduttaa.

9. Kykenen harvoin nauttimaan elämän tarjoamista ylellisyyksistä. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

10. Minun on vaikea elää hetkessä. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

11. Minun on vaikea hemmotella itseäni. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

12. Kadun menetettyjä, rikastavia kokemuksia ja mahdollisuuksia, joihin en ole tarttunut. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

13. Minun on vaikea sallia itselleni nautintoa. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

14. En useinkaan pysty nauttimaan houkuttelevista mahdollisuuksista. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

15. Kuvittele, että saisit tänään 100 eur oa pankkitilillesi. Saat käyttää rahasumman mihin ikinä haluat! Sinulla on kuitenkin toinen vaihtoehto: Jos

odotat vuoden, saat valitsemasi summan pankkitilillesi vuoden päästä.

Kuinka paljon rahaa sinun pitäisi vähintään saada, jotta jaksaisit odottaa vuoden, että saat rahat tilillesi?

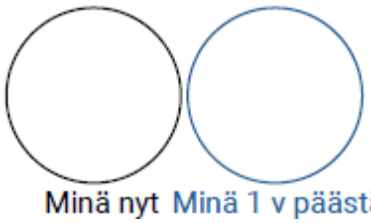
4. Minuuden muuttuminen

Tässä osuudessa esitetään kysymyksiä siitä, kuinka paljon uskot muuttuvasi ajan kuluessa.

16. Mikä alla olevista ympyräpareista kuvaa parhaiten sitä, kuinka samanlainen olet nyt verrattuna siihen, millainen olet 1 vuoden kuluttua?

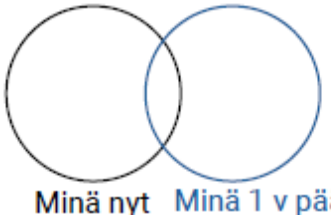
Pohdi kysymystä ajattelemalla ominaisuuksia, jotka tekevät sinusta sen, kuka olet. Näitä ominaisuuksia voivat olla esimerkiksi persoonallisuus, temperamentti, mieltymykset, vastenmielisyydet, uskomukset, arvot, tavoitteet, päämäärät ja ihanteet. *

○



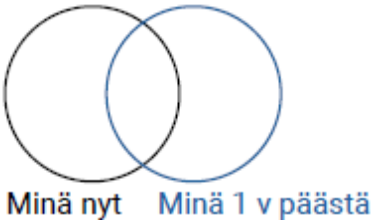
Täysin erilainen

○



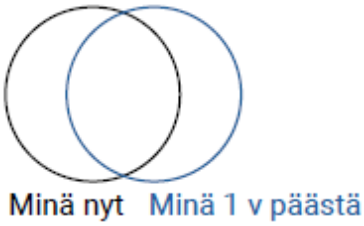
Hyvin erilainen

○



Jokseenkin erilainen

○



Jokseenkin samanlainen

○

Hyvin samanlainen

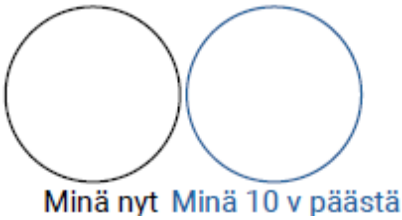
○

Täysin samanlainen

17. Mikä alla olevista ympyräpareista kuvaa parhaiten sitä, kuinka samanlainen olet nyt verrattuna siihen, millainen olet 10 vuoden kuluttua?

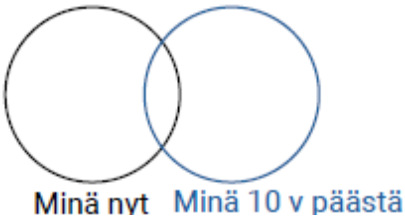
Pohdi kysymystä ajattelemalla ominaisuuksia, jotka tekevät sinusta sen, kuka olet. Näitä ominaisuuksia voivat olla esimerkiksi persoonallisuus, temperamentti, mieltymykset, vastenmielisyydet, uskomukset, arvot, tavoitteet, päämäärät ja ihanteet. *

○



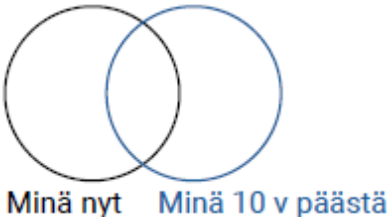
Täysin erilainen

○



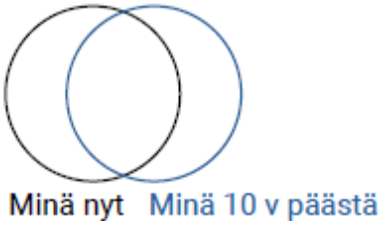
Hyvin erilainen

○



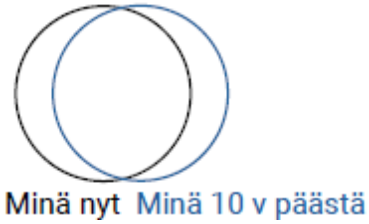
Jokseenkin erilainen

○



Jokseenkin samanlainen

○



Hyvin samanlainen

○

Täysin samanlainen

18. Kuinka samanlaisia uskomuksesi ovat nyt verrattuna siihen, millaisia ne ovat 10 vuoden kuluttua? *

1. Täysin erilaisia	2. Hyvin erilaisia	3. Jokseenkin erilaisia	4. Jokseenkin samanlaisia	5. Hyvin samanlaisia	6. Täysin samanlaisia
○	○	○	○	○	○

*

19. Kuinka samanlainen persoonallisuutesi on nyt verrattuna siihen, millainen se on 10 vuoden kuluttua? *

1. Täysin erilainen	2. Hyvin erilainen	3. Jokseenkin erilainen	4. Jokseenkin samanlainen	5. Hyvin samanlainen	6. Täysin samanlainen
○	○	○	○	○	○

*

20. Kuinka samanlaisia arvosi ovat nyt verrattuna siihen, millaisia ne ovat 10 vuoden kuluttua? *

1. Täysin erilaiset	2. Hyvin erilaiset	3. Jokseenkin erilaiset	4. Jokseenkin samanlaiset	5. Hyvin samanlaiset	6. Täysin samanlaiset
○	○	○	○	○	○

*

21. Kuinka elävästi voit kuvitella, millainen olet 10 vuoden kuluttua? *

1. En ollenkaan	2. En erityisen elävästi	3. Jokseenkin elävästi	4. Elävästi	5. Hyvin elävästi	6. Täysin elävästi
○	○	○	○	○	○

*

22. Kuinka elävästi voit kuvitella, miltä näytät 10 vuoden kuluttua? *

	1. En ollenkaan	2. En erityisen elävästi	3. Jokseenkin elävästi	4. Elävästi	5. Hyvin elävästi	6. Täysin elävästi
*	○	○	○	○	○	○

23. Kuinka elävästi voit kuvitella, millaiset perhesuhteesi ovat 10 vuoden kuluttua? *

	1. En ollenkaan	2. En erityisen elävästi	3. Jokseenkin elävästi	4. Elävästi	5. Hyvin elävästi	6. Täysin elävästi
*	○	○	○	○	○	○

24. Pidätkö siitä, millainen tulet olemaan 10 vuoden kuluttua? *

	1. En ollenkaan	2. En erityisen paljon	3. Jokseenkin paljon	4. Paljon	5. Hyvin paljon	6. Täysin
*	○	○	○	○	○	○

25. Pidätkö siitä, millainen persoonallisuutesi todennäköisesti on 10 vuoden kuluttua? *

	1. En ollenkaan	2. En erityisen paljon	3. Jokseenkin paljon	4. Paljon	5. Hyvin paljon	6. Täysin
*	○	○	○	○	○	○

26. Pidätkö siitä, millaiset toimintatapasi todennäköisesti ovat 10 vuoden kuluttua? *

	1. En ollenkaan	2. En erityisen paljon	3. Jokseenkin paljon	4. Paljon	5. Hyvin paljon	6. Täysin
*	○	○	○	○	○	○

5. Itsetunto

Tässä osuudessa esitetään itsetuntoon liittyviä väitteitä.

27. Minulla on korkea itsetunto. *

1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
○	○	○	○	○	○	○

*

28. Se, miten arvioin kykyjäni muihin verrattuna, vaihtelee paljon. *

1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
○	○	○	○	○	○	○

*

29. Positiiviset ja negatiiviset tunteet itseäni kohtaan sekoittuvat usein toisiinsa. *

1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
○	○	○	○	○	○	○

*

30. Suhtautumiseni itseäni kohtaan ei vaihtele paljoakaan. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

31. En välitä siitä, mitä muut ajattelevat minusta. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

32. Sillä, mitä muut ajattelevat minusta, ei ole vaikutusta siihen, mitä ajattelen itsestäni. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

33. Minua ei haittaa, jos muut suhtautuvat minuun negatiivisesti. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

34. Itsetuntoni on riippuvainen siitä, mitä mieltä muut ovat minusta. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

35. En voi kunnioittaa itseäni, jos muut eivät kunnioita minua. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

36. Se, että pärjään par emmin kuin muut, kasvattaa itsekunnioitustani. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

37. Tieto siitä, että olen muita par empi jossakin tehtävässä, nostaa itsetuntoani. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

38. Siihen, kuinka paljon arvostan itseäni, vaikuttaa se, kuinka hyvin pärjään muiden kanssa kilpaillessani. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

39. Siihen, kuinka paljon arvostan itseäni, vaikuttaa se, kuinka hyvin pärjään kilpailullisissa tehtävissä. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

40. Arvostan itseäni enemmän, kun suoriudun par emmin kuin muut jossakin tehtävässä tai taidossa. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

41. Minulla on par empi tunne itsestäni, kun tiedän pärjääväni hyvin akateemisesti. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

42. Hyvin suoriutuminen opinnoissani tuo minulle itsekunnioitusta. *

1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
○	○	○	○	○	○	○

*

43. T unnen itseni huonoksi aina kun akateeminen suoritukseni on puutteellinen. *

1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
○	○	○	○	○	○	○

*

44. Mielipiteeni itsestäni ei ole sidoksissa siihen, miten hyvin pärjään opinnoissa. *

1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
○	○	○	○	○	○	○

*

45. Itsetuntooni vaikuttaa akateeminen suoriutumiseni. *

1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
○	○	○	○	○	○	○

*

46. Itsetuntooni vaikuttaa se, kuinka paljon rahaa ansaitsen. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

47. Itsetuntoni riippuu siitä, onko minulla paljon rahaa. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

48. T unnen itseni huonoksi, kun en ansaitse mielestäni tarpeeksi rahaa. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa mieltä
*	○	○	○	○	○	○	○

49. Mielipiteeni itsestäni ei ole sidoksissa siihen, kuinka paljon rahaa ansaitsen. *

	1. Täysin eri mieltä	2. Eri mieltä	3. Jokseenkin eri mieltä	4. Ei samaa eikä eri mieltä	5. Jokseenkin samaa mieltä	6. Samaa mieltä	7. Täysin samaa miel
*	○	○	○	○	○	○	○

50. Tunnen itseni paremmaksi, kun pidän talousasiani hallinnassa. *

*

Olet päässyt kyselyn loppuun. Kiitos osallistumisesta!

51. Anonyymi palaute (valinnainen)