

## A Systematic Literature Study on the Avoidance of Decision-Making: A PRISMA Approach

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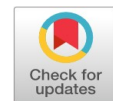
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**Abstract:** The avoidance of decision-making and role of intuition in decision making has been overlooked in research. The current paper is intended to lay a better theoretical foundation for empirical research. Recently focus has drawn to the avoidance decision making as decision-making style (Launer and Cetin, 2025). However, the topic needs to be deepened to better understand the reasons for not taking decisions. A PRISMA Study was performed to systematically search for relevant literature in Google Scholar, PubMed, Scopus, Web of Science, and PsycINFO. Out of initially found  $n = 982$  literature sources,  $n=52$  sources were examined. As a result, an improved theoretical literature base is presented as well as a measurement instrument ready to be tested in empirical studies.

**Keywords:** Avoidance, Decision-Making, PRISMA approach, Intuition, Emotional Factor, Personality Traits.

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### INTRODUCTION

Decision-making is an integral part of human behavior, yet individuals often actively avoid making choices even when action is necessary. This phenomenon, known as decision avoidance, has been recognized as a complex interplay between cognitive, emotional, and motivational factors (Anderson, 2003). Rather than being a result of simple indecision, avoidance reflects a dynamic psychological process in which individuals delay, delegate, or altogether refrain from making a decision to minimize anticipated negative outcomes or emotional discomfort (Luce, 1998; Zeelenberg, 1999).

Several distinct forms of decision avoidance have been identified in the literature. Choice deferral (the act of putting off a decision) and status quo bias (the desire to maintain the current situation) are two relatively simple strategies for reducing the mental effort related to choice (Samuelson & Zeckhauser, 1988). Omission bias (the tendency to prefer inaction to action) and inaction inertia (the reluctance to act after one has missed an opportunity) are other strategies that have been shown to protect an individual from feelings of regret and feelings of responsibility (Anderson, 2003; Zeelenberg et al., 2002).

All of these strategies represent a complex interplay of rational evaluations and emotional responses. The rational-emotional model put forth by Anderson (2003) posits that people will engage in a rational cost-benefit analysis and that they approach decisions considering such emotional possibilities as regret, anxiety, responsibility, and guilt. If a person expects the emotional costs of making a decision will outweigh the benefits, then that person is most likely to avoid addressing the problem at all. There are also other cognitive-related issues that naturally lead to decision avoidance. For example, the problem of information overload (Iyengar & Lepper, 2000) and preference uncertainty (Tversky & Shafir, 1992), which make decision making difficult because there is too much information to process or they don't feel confident about their preferences.

Although decision avoidance is commonly practiced, it can have significant implications for individuals and organizations. In organizational settings, avoidance behaviors may create inefficiencies, slow responses to urgent

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situations and prevent organizations from engaging in activities that may lead to growth (Milkman, Chugh, & Bazerman, 2009). As a result, understanding what causes decision avoidance and what can be done to mitigate its impact has become an important and flourishing area of investigation in psychology, behavioral economics, and organizational studies (Launer, 2023; Launer & Svenson, 2022).

Scott and Bruce (1995) introduced a tool that measured decision-making styles which included the avoidance of decision-making. They outlined four decision styles based on previous theories and research, defining them behaviorally: (a) the rational style involves a wide-ranging research and rational assessment of alternatives, (b) the intuition dimension relies on instincts and feelings, (c) the dependent dimension seeks advice and support by others, and (d) the avoidant style tries to evade making decisions.

Their research revealed a negative correlation between rationality and avoidance within the decision-making dimension among both military officers and students. This finding appears to align with the earlier work of Phillips et al. (1984), who observed that individuals with a rational decision-making style tend to address problems directly rather than avoiding them. However, it is important to acknowledge that one aspect of Phillips et al.'s (1984) findings was not confirmed in the present study. Specifically, while Phillips and colleagues reported that those individuals whose decision-making was more reliant did not avoid problems as their rational or intuitive counterparts, the current results suggest a different scenario. It appears that dependent decision-makers may be more likely to engage in avoidance behaviors, which supports the idea that individuals with a dependent decision-making style may be more passive and inclined towards avoidance.

The avoidance of decisions as a decision-making dimension is lacking attention in the field of decision-making (Launer & Cetin, 2023; 2025). The included studies appear to demonstrate a nuanced understanding of decision-making avoidance. It is often said that decision avoidance can be described as the propensity to postponement, defer or avoid making necessary choices. This is in line with the ideas of Anderson (2003) and Luce (1998). Anderson (2003) and Ferrari (1992) have proposed a categorization of decision avoidance into several behaviors, which may be of interest: deferral (postponing decisions), delegation (passing decisions to others), status quo bias (preferring no change), and omission bias (preferring inaction over action).

Research suggests that a variety of emotional and cognitive factors may play a role in decision avoidance. Anticipated regret has been found to increase avoidance tendencies (Zeelenberg, 1999), while information overload and cognitive fatigue have also been identified as significant factors (Iyengar & Lepper, 2000; Patalano & Wengrovitz, 2007). Some studies have suggested a link between personality traits associated with avoidant coping styles and decision avoidance behaviors (Anderson, 2003; Mann et al., 1997).

In organizational settings, there is the possibility that decision avoidance may result in delays to critical business operations. Milkman, Chugh, and Bazerman (2009) investigated how deferral and delegation can potentially undermine leadership effectiveness and organizational trust. Then there is a chance that tools introduced by Scott and Bruce (1995) and Mann et al. (1998) such as the general decision-making style Inventory and the Melbourne decision-making questionnaire by, could provide reliable means to assess avoidant decision-making tendencies.

Several intervention strategies have been proposed to mitigate decision avoidance. It has been suggested that structured decision-making models, such as those proposed by Janis and Mann (1977), may be effective in reducing indecision. It has been suggested that a "satisficing" mindset, rather than a maximizing one, can also help lower decision anxiety and encourage action (Schwartz et al., 2002).

## **METHODOLOGY**

A PRISMA-based systematic literature review was performed to research the topic of avoidance of decision-making. If I'm not mistaken, the identification phase involved a search across major databases, including Google Scholar, PubMed, Scopus, Web of Science, and PsycINFO. The search terms that were used included "decision-making avoidance," "decision avoidance," "decision-making procrastination," "decision deferral," and "avoidant decision styles." The search was restricted to articles issued between 2000 and 2024. The primary exploration led a total of 982 articles.

In the screening phase, we applied inclusion criteria that we believe were important to consider. These criteria included studies that were published in peer-reviewed journals, directly addressed decision-making avoidance behaviors, were written in English, and focused on psychological, organizational, or behavioral aspects of decision-making. It is my understanding that the exclusion criteria were designed to ensure that studies were not excluded

on the basis of their focus on clinical disorders without broader relevance to decision avoidance. I also believe that non-peer-reviewed sources and non-English publications were to be excluded. Following the removal of duplicates, the number of articles was reduced to 742.

During the eligibility phase, 183 full-text articles were assessed. Following a thorough review, 97 articles were excluded as they were not directly related to decision avoidance mechanisms, and 34 articles were excluded as they only focused on clinical populations without finding generalizable results. After meeting all criteria 52 research articles were selected to include in final analysis.

If I may, I would like to summarize the flow of the study selection: an initial pool of 982 records was narrowed down to 742 after duplicates were removed. After assessing 183 full-text publications for worthiness, 52 studies were involved in the final analysis.

**PRISMA Analysis**

To conduct a rigorous and transparent literature review, we adhered to the PRISMA 2020 guidelines for systematic reviews. Our initial search strategy involved five major academic databases—Google Scholar, PubMed, Scopus, Web of Science, and PsycINFO—which yielded a total of 982 records. After carefully removing 240 duplicate entries, 742 unique records were retained for the screening phase. During this stage, we reviewed the titles and abstracts of all 742 records to determine their relevance to the topic of decision avoidance. As a result, 559 articles were excluded because they did not meet the basic inclusion criteria, such as thematic relevance or research focus.

We then proceeded to the eligibility assessment phase, during which the full texts of the remaining 183 articles were thoroughly evaluated. This deeper examination led to the exclusion of 131 articles: 97 were found to be unrelated to the core subject of decision avoidance, while another 34 were excluded because they focused exclusively on clinical samples, which did not align with the scope of our research. After this careful and methodical process, a total of 52 studies were deemed suitable for inclusion in the final qualitative synthesis. These selected studies provided robust insights and a solid foundation for our analysis, ensuring both depth and relevance in the literature reviewed.

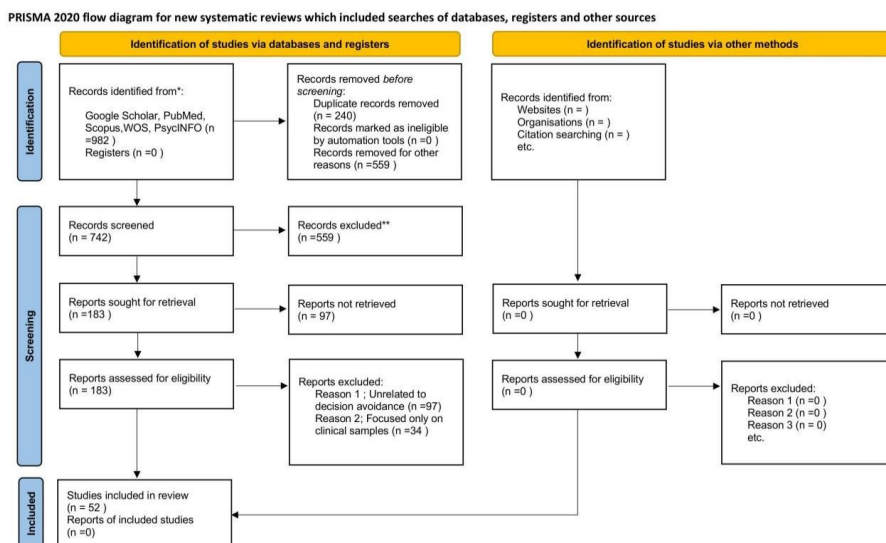


Figure 1: PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources

## **RESULTS**

The findings from the systematic review of the literature clearly establish that avoidance of decision-making is a robust and multidimensional phenomenon, influenced by a constellation of emotional, cognitive, and personality-related factors. Across studies, decision avoidance consistently emerges as a significant behavioral tendency with profound implications for both individual outcomes and broader organizational dynamics.

### **Emotional Factors**

One of the primary emotional drivers of decision avoidance is the fear of regret. Individuals anticipating potential negative outcomes often defer or avoid decisions altogether to minimize the emotional discomfort associated with possible failure (Zeelenberg, 1999; Luce, 1998). Anticipated regret acts as a powerful psychological deterrent, leading individuals to maintain the status quo or opt for inaction over taking decisive steps, even when change may be beneficial.

### **Cognitive Factors**

Cognitive load plays an equally critical role in the emergence of decision avoidance. Studies indicate that when individuals are confronted with information overload, their ability to process alternatives effectively diminishes, resulting in deferral behaviors (Anderson, 2003). As decision complexity increases—through the proliferation of options, conflicting information, or high stakes—individuals are more likely to postpone or abandon decision-making efforts. Cognitive fatigue, ambiguity, and choice conflict are thus central cognitive contributors to avoidance tendencies.

### **Personality Traits**

Personality-based factors further explain variance in decision-avoidant behaviors. Research shows that individuals with higher tendencies toward avoidant coping styles, lower tolerance for uncertainty, and greater sensitivity to negative outcomes are more probable to involve in decision avoidance (Mann et al., 1997; Scott & Bruce, 1995). The (GDMS) inventory and the (MDMQ) have provided reliable empirical evidence for the presence of an "avoidant" decision-making dimension, operationalizing it as a stable personal difference variable measurable across contexts.

*Impact on individual and organizational outcomes :* The consequences of decision avoidance extend beyond personal well-being. Prolonged or habitual avoidance is linked to increased psychological distress, reduced career progression, missed opportunities, and compromised leadership effectiveness. In organizational settings, decision avoidance among key personnel can result in delays, inefficiencies, and strategic paralysis, severely undermining institutional effectiveness and agility (Milkman, Chugh, & Bazerman, 2009).

### **Avoidance of Decision-Making - Reason and Emotion**

Decision avoidance has been extensively examined across multiple fields, with researchers identifying several mechanisms by which individuals delay, defer, or resist making choices. Anderson (2003) established a broad framework that highlights the potential interplay between rational decision-making and emotion, suggesting that the decision to avoid is more than just irrational thinking. Drawing from the empirical literature, Anderson (2003) discovered the presence of four major types of decision avoidance: (i) status quo bias, (ii) choice deferral, (iii) inaction inertia and (iv) omission bias (Anderson, 2003; Luce, 1998; Zeelenberg, 1999).

The rational-emotional model that Anderson (2003) called attention to is useful in elucidating these patterns, and highlighted the notion that avoidance should not only be construed as irrational thinking, but it can also be part of reasoned decision-making in which people are, at least implicitly, weighing the costs and benefits of taking action or making a decision. Individuals can consider the potential costs associated with taking action, vs. those associated if you do nothing (including the expected affective regret / emotional pain). At some point, if individuals perceive that the expected regret resulting from making a choice becomes too high, then they may decide to delay / defer or avoid a decision altogether (Zeelenberg, 1999; Luce, 1998). The lack of ability to distinguish between a numbers of alternatives doubly increases the uncertainty, compounding the reluctance to generate and evaluate alternatives, and ultimately the fear that they will make a poor choice.

In addition to the rational calculations, an emotional response clearly plays a role in decision avoidance. An

individual's experiencing negative emotions such as anxiety, fear of and anticipatory regret have shown tendency to avoid or defer their decision (Anderson, 2003; Zeelenberg, 1999). Coping strategies that seek to avoid emotional salience behaviors (e.g. staying in status quo or preferring not to act) can result from this observation. Moreover, counterfactual thinking (the mental simulation of alternative outcomes) and preference uncertainty (ambiguity about one's true preferences) have been found to exacerbate the likelihood of avoidance behaviors (Luce, 1998; Zeelenberg, 1999).

### **Avoidance and Decision Making in Anxiety**

While the intense dread and apprehension associated with severe anxiety can cause significant personal distress, it is often the excessive avoidance behaviors that lead to the greatest impairment. These behaviors prevent individuals from engaging in social activities, walking in public, or addressing their emotions. Similarly, in obsessive-compulsive disorder, the distress caused by obsessions is compounded by avoidance behaviors like checking, rituals, and compulsions, which interfere with normal life. Additionally, while fear itself is not typically life-threatening, avoidance can be problematic in some cases. For example, a fear of flying may lead to driving long distances (despite flying being safer) or avoiding painful thoughts may result in harmful drinking (Beckers & Craske, 2017).

In spite of the key function of avoidance due to anxiety, clinical conditions and fear, its research has not consistently garnered proper attention in psychological research. The focus on avoidance culture in behaviorist era was shadowed, with the rise of interest in cognitive psychology, leading to decades of limited theoretical progress in understanding avoidance, despite its recognized importance in clinical psychology. However, in current years, there has been a rebirth of attention in avoidance behavior, with a significant increase in empirical and theoretical research over the past years (Kryptos et al., 2015). This revival has brought more sophisticated theoretical analyses and a deeper understanding of both the behavioral and neurobiological aspects of avoidance in both normal and clinical contexts (Kryptos et al., 2015; Beckers & Craske, 2017; LeDoux et al., 2017).

The waning of interest in avoidance science may somewhat be related to its inherent complexity regarding the relationship between anxiety and avoidance. Mowrer (1951) drew attention to the role of anxiety on the development and maintenance of avoidance behavior and avoidance responses. However, recent theoretical and empirical developments have challenged the linkage between anxiety and avoidance learning based on the finding that fear and avoidance may not always be aligned. Although anxiety tends to accompany avoidance behavior, anxiety can be found to occur, even when there has not been an associated avoidance response, and it is equally possible for individuals to avoid situations without observable anxiety (see Barlow, 2002; Craske et al. 2009). As a consequence of the multifaceted and intricate issues involved, the growing field of fear learning research has established its focal point elsewhere, into related fields, such as investigating the principles involved in Pavlovian conditioning, however, the reasons behind avoidance behavior are at the crux of the impact of clinical anxiety, and the nature of avoidance and related decision-making processes are critical to develop clinical solutions (Beckers & Craske, 2017).

Recent discussions have further explored the idea presented by Mowrer's two-factor theory, emphasizing the expectations of threat (Lovibond et al., 2008), prospective settings (De Houwer et al. 2005), influences of Pavlovian learning (Kryptos et al., 2014), as well as context-specific habitual behavior (LeDoux et al., 2017) in circumscription behavior. All of these developments have aided our understanding of and paved the way to explore the relations and distinctions that exist between fear, anxiety, defensive exclusion and avoidance (see Beckers & Craske, 2017).

Arnaudova et al. (2017) examined different mechanisms by which avoidance could become extreme behavior, as typically seen in anxiety, fear and related conditions. The authors review findings from animal research and experimental cognitive psychology to elaborate processes that could lead to extreme avoidance, and to suggest clinical possibilities for decreasing avoidance. In another review, Kirlic et al. (2017) suggest that the key to understanding avoidance behavior lies not just in avoidance tendencies but in the struggle between method and avoidance energies, along with the resulting dysregulated decision-making. They present basic animal paradigms and their human adaptations to study this conflict, highlighting the underlying neurobiological mechanisms. Treanor and Barry (2017) offer a compelling theoretical analysis of how avoidance behavior is sustained through associative fear learning and extinction. They emphasize the different roles avoidance can play and suggest behavioral and

pharmacological strategies, particularly in combination with exposure treatment, to discourage avoidance in clinical anxiety. These approaches warrant further investigation in future studies (Beckers & Craske, 2017).

Recent empirical studies has shown new emerging patterns of relationship between fear and avoidance, revealing that while fear can often motivate avoidance behaviors, the two are not always directly correlated; individuals may engage in avoidance without experiencing overt fear, and conversely, may experience fear without necessarily resorting to avoidance (Krypotos et al., 2015; Mobbs et al., 2020). Echoing Kirlic et al. (2017), Rattel et al (2017) and Bublatzky et al. (2017) demonstrate that method incentives can decrease avoidance actions in the laboratory, whether avoidance stems from instructed threats or experientially acquired fears. These findings suggest that approach incentives may disrupt the cycle of avoidance, which typically blocks exposure to fear-reducing information and reinforces continued avoidance (Beckers & Craske, 2017).

Ng and Lovibond (2017) highlight the influence of threat expectations in maintaining avoidance by showing that the purpose to avoid is as effective as actual avoidance in reducing anticipatory excitement. This supports the expectancy research of avoidance, which has gained prominence as a new theoretical framework (Lovibond et al., 2008; Krypotos et al., 2015).

Vervliet et al. (2017) offer an innovative perspective by proposing that feelings of relief reinforce avoidance behavior and that dysregulated relief processing may contribute to excessive, habit-like avoidance. Meanwhile, Xiu et al. [this issue] emphasize the importance of individual learning histories, showing that the persistence of avoidance during threat extinction depends on the initial reinforcement rate of avoidance (Beckers & Craske, 2017).

Finally, Hunt et al. (2017) provide evidence that individual differences in distress tolerance and coping strategies, such as suppression or distraction, influence when fear responses lead to deliberate avoidance, especially in response to generalized threats.

This refines a theoretical emphasis of avoidance in fear, anxiety and offer practical, analyzable proposals for improving the clinical administration of avoidance behaviors (Beckers & Craske, 2017).

### **Decision Making In Avoidance – Reward Conflict**

In humans, decision-making is affected by the anticipation of reward and punishment; however, little is known about how these two processes interact. The avoidance-reward conflict task is a novel method used to examine this interaction, as it varies the amount of potential reward and likelihood of receiving a penalty within a single framework. It is applicable for both non-human primates (NHPs) and humans (Sierra-Mercado et al., 2025).

The ability to seek rewards and avoid threats appears to be fundamentally an adaptive trait conserved in diverse species. It has been argued that humans and non-human animals are able to form associative links between environmental cues and reward or aversion (Phelps & LeDoux, 2005; Schultz, 2006). A growing amount of behavior and neurobiology research on reward and fear across species with a behavioral impetus suggests that the neural circuits are strikingly conserved (Phelps & LeDoux, 2005; Schultz, 2006). Research in non-human primates has even suggested that the amygdala may be involved in and mediate fear learning and avoidance (Weiskrantz, 1956). This fits with neuroimaging studies with humans that have measured amygdala activation to the acquisition of fear responses and evaluation of negatively valenced stimuli (Irwin et al., 1996; LaBar et al., 1998).

According to research examining reward processing in non-human primates (NHPs), ventral striatum neurons may show firing patterns related to both anticipated and immediate rewards (Apicella et al., 1991a, 1991b; Schultz et al., 1992). Human neuroimaging studies using PET and fMRI methodologies appear to further corroborate these findings, consistently implicating the ventral striatum in the evaluation and receipt of rewarding outcomes (Elliott et al., 2000; Delgado et al., 2000). Additionally, dopaminergic neurons in the midbrain - the parts of the basal ganglia circuitry - have been implicated in reward signals. There is convergent evidence from several non-human primate (Mirenowicz & Schultz, 1994) and human studies (Drevets et al., 2001; Boileau et al., 2003) to support this notion.

In both human and non-human animals, decision processes are strongly impacted by the availability of rewards and the avoidance of punishments. Groundbreaking experimental work with humans has demonstrated that humans often choose to delay gratification for larger rewards later (Mischel and Metzner, 1962) indicating that making decisions involves a futuristic decision to value options. It appears that the likelihood of punishment will also affect the decisions humans make (Mischel and Grusec, 1967). Subsequently, humans will change their decision if it reduces the potential for punishment. Parallel findings in animal research have confirmed that both the magnitude of prospective rewards and the anticipated threat (LeDoux, 2012, Schultz, 2000, 2006) critically shape behavioral

responses, underscoring the evolutionary conservation of these motivational influences.

Despite these conceptual overlaps, the neurobiological mechanisms underlying reward and fear processing have traditionally been studied in isolation, resulting in a fragmented understanding of how these two systems interact during decision-making. Addressing this gap requires the development and application of experimental paradigms capable of probing the integration of reward and aversion within a single framework, ideally across species. Recent calls within the literature emphasize the need for cross-species paradigms that are equally applicable to (NHPs) and humans, facilitating a more cohesive and translational investigation of the neural circuits governing complex decision-making behaviors (Sierra-Mercado et al., 2025).

In the ARC task, it appears that (NHPs) and humans may possess the capacity to discern between varying magnitudes of reward and degrees of aversion. However, it is worth considering that the behavioral disposition observed across species appear to show a striking similarity: when the risk of punishment is minimal, both NHPs and humans overwhelmingly prefer the option associated with reward. It seems that, no matter what size the reward is, the probability of choosing it consistently exceeds 90% in conditions of low aversion. However, it is interesting to note that this preference undergoes a fairly significant change as the odds of receiving punishment are increased. In situations of medium aversion, smaller rewards were declined more frequently, as subjects would choose a safer option that preferred avoiding punishment (Sierra-Mercado et al., 2025). These findings suggest that both species are capable of changing their decision-making strategies in response to changing risk-reward contingencies.

### **Measuring the Avoidance of Decision-Making**

Over the past several decades, measuring decision avoidance has significantly progressed through the acknowledgement that avoidance is a separate and measurable part of decision-making (as a part of decision-making behavior). Two of the most well-known and validated interventions in this area were the (GDMS) Inventory developed by Scott and Bruce (1995) and the (MDMQ) created by Mann et al. (1997) which have provided researchers with ways to operationalize decision avoidance in many different contexts and situations.

The GDMS offers a multidimensional approach to capturing individual differences in decision-making tendencies. It distinguishes between rational, dependent, avoidant, intuitive and spontaneous decision making styles. Of particular relevance to decision avoidance is the "Avoidant" decision-making dimension, which identifies individuals who habitually delay or sidestep decision-making tasks. The GDMS has proved strong psychometric characteristics, including the internal consistency and construct validity, and has been widely adopted in both organizational and psychological research. Its strength lies in its ability to capture avoidance behaviors not only as a reactive coping strategy but also as a stable personality-driven decision-making style (Scott & Bruce, 1995). It includes items like "I avoid making important decisions until the pressure is on", "I postpone decision making whenever possible", see appendix A for questionnaire.

A multistage, four-sample study was undertaken to develop an instrument for measuring decision-making dimensions that is conceptually coherent and psychometrically robust. The definitions were carefully derived from existing theoretical frameworks, and items were specifically designed to capture four primary decision-making dimensions: rational, avoidant, intuitive, and dependent. In the spirit of continuous improvement and with the goal of enhancing the measurement structure, a series of principal-axis factor analyses with varimax rotation were shown, followed by detailed item analyses. This iterative process has informed the development of four conceptually distinct scales, each of which seems to exhibit acceptable reliability with acceptable Cronbach's alpha reliability of .68 to .94 and a relatively stable factor structure.

In the course of developing the scales, we discovered that a fifth decision-making style, spontaneous decision-making, had emerged. This was not something expected. Spontaneous decision-making was then integrated into the framework of the instrument. Further analyses evaluated independence amongst the five scales of decision-making style and assessed concurrent validity to assess whether the newer measure was congruent with some related construct. The final discussion contextualized the new instrument within the broader decision-making literature, highlighting its contributions and distinctions from previously established models.

In addition to the GDMS, the MDMQ employs a systematic approach to examine the nature of the coping dynamics involved in decisional conflict. The MDMQ assesses vigilant, procrastinator, hyper vigilant and buck pass coping behaviors, and offers a more finely detailed look at the emotional and behavioral processes leading to decision avoidance. The MDMQ's "Procrastinator" and "Buck Pass" subscales are of particular importance because

they measure the tendency to delay decisions or to shift responsibility to another party, respectively, both of which fall under the umbrella of avoidance behaviors. The MDMQ is a highly validated instrument across a range of cultures, with Man et al. (1997) demonstrating the utility of the instrument across cultures in cross-national research and the characteristic of being able to identify decision avoidant behaviors in a variety of demographic groups.

Mann et al., (1982) published a paper on examining the factorial validity of the Flinders Decision Making Questionnaire (Mann, 1982), which is a self-report questionnaire of 31 items that examined the various strategies individuals utilize in decision-making contexts. The questionnaire is based on the conflict science of decision-making presented by Janis and Mann (1977), which outlines that individuals can draw upon or have a general tendency toward three core coping styles, vigilance, hyper-vigilance, and defensive avoidance. Defensive avoidance is also separated into three behaviors: procrastination, buck-passing, and rationalizing. The Flinders Decision Making Questionnaire was developed to look at individual decision-making strategies in detail, and operationalized constructs to measure how individuals cope in stressful, conflicted decision-making situations.

The factorial validity of the Flinders Decision Making Instrument was assessed by means of confirmatory factor analysis (CFA) performed with LISREL software. In the course of this analysis, 5 diverse applicable models were tested, each representative for alternative structural relations between the proposed decision-coping forms. However, none of the original models demonstrated satisfactory fit to the statistics, and thus, none could be statistically authorized.

As a consequence of these results, a shortened version of the instrument was constructed reducing the number of items in the questionnaire (31 items) to a total of 22. These variables model find four distinct factors: vigilance; hypervigilance; buck-passing; and procrastination. Notably, the defensive avoidance category which was proposed as a larger construct encompassing procrastination, buck-passing, and rationalization, changed into variables that would have more distinguishable or measurable sub-components.

The revised 22-item model demonstrated adequate model fit across individual country samples as well as within the aggregated total sample, indicating that the new factor structure was both stable and generalizable. Based on these robust findings, it was recommended that the 22-item version, formally titled the (MDMQ), replace the original Flinders DMQ for the assessment of decision-coping patterns. The MDMQ thus provides a more psychometrically sound instrument for measuring decision-making behavior under conditions of conflict, offering improved reliability and construct validity over its predecessor.

### **Vigilance**

- The item reflecting evaluating all the options showed factor loading of .62 and corrected item-total correlation of 0.39.
- Item considering disadvantages of all alternative has factor loading of 0.64 and corrected item-total correlation of 0.42.
- The item for carrying best possible decision showed factor loading 0.61 and item-total corrected correlation of 0.37.
- Item for collecting maximum information before decision making has factor loading of 0.53 and corrected item-total correlation 0.28.
- Item for taking maximum precautionary measure showed factor loading of 0.72 and corrected item-total correlation of 0.52.

### **Buck-passing**

- The item representing an inclination to avoid decision-making had a factor loading of 0.79 and a corrected item-total correlation of 0.63.
- The item recognizing reluctance to make decisions unless absolutely necessary had a loading of 0.68 and a corrected item-total correlation of 0.46.
- The item indicating a preference to allow others to make decisions produced a loading of 0.80 and a corrected item-total correlation of 0.63.
- The item noting discomfort with accepting responsibility for decisions had a factor loading of 0.72 and a corrected item-total correlation of 0.52.
- The item reflecting a willingness to defer decisions to others when the option was available had a loading of

0.74 and a corrected item-total correlation of 0.55.

- The item indicating a preference for decisions to be made by people with more information had a factor loading of 0.61 and corrected item-total correlation of 0.37.

### **Procrastination**

- Each element which indicated a tendency to delay decision-making until the point of inaction had a factor loading of 0.76 and a correlation of item-total correlation 0.58.
- The item that reflected doing trivial matters delayed decision making displayed a loading of 0.59 and item-total correlation of 0.35.
- The item that reflected that decision is made but delayed showing action displayed a loading of 0.59 and item-total correlation of 0.35.
- The item that indicated great delay in starting the decision making process had a factor loading of 0.61 and corrected item-total correlation of 0.37.
- The item that reflected a general pattern of procrastinating on decision making displayed a corrected item-total correlation of 0.32.919 would be the lowest and highest loaded items across all dimensions. A factor loading of 0.82 and a corrected item-total correlation of 0.66.

### **Hypervigilance**

- The item reflecting pessimism regarding difficult decisions indicated a factor loading of 0.63 and a corrected item-total correlation of 0.39.
- The item reflecting a perceived feeling of time pressure while making a decision indicated a factor loading of 0.60 and a corrected item-total correlation of 0.35.
- The item reflecting abrupt changes in preference, based on trivial concerns, indicated a factor loading of 0.55 and a corrected item-total correlation of 0.31.
- The item reflecting cognitive difficulty making pressured-based decisions showed a factor loading of 0.56 and a corrected item-total correlation of 0.31.
- The item reflecting rationalization behavior post-decision indicated a factor loading of 0.58 and a corrected item-total correlation of 0.36.

The GDMS and MDMQ have been instrumental in establishing decision avoidance as a measurable and theoretically significant construct within the decision-making literature. Their psychometric strengths and wide applicability have contributed substantially to the empirical rigor of research in this field, enabling deeper insights into the emotional, cognitive, and contextual factors that drive individuals to avoid making decisions. Future research would benefit from further refining these instruments to capture situational factors and from developing complementary tools that can assess decision avoidance behavior in real-time and across digital environments (Scott & Bruce, 1995; Mann et al., 1997).

Launer and Cetin (2023, 2025) researched the items by Scott and Bruce in more detail in a two empirical analysis, one in Germany (n=700) and internationally (n=1500). Their items used were: I avoid making important decisions until the pressure is on, I postpone decision making whenever possible, I often procrastinate when it comes to making important decisions, (Questionnaires are attached in Appendix A).

Fear avoidance (FA) related to pain is a common problem and is clinically relevant for patients experiencing painful medical conditions. FA is marked by a combination of catastrophic cognitions related to pain, hypervigilance to signals of pain, and behaviorally avoiding any activities believed to exacerbate the pain (Vlaeyen & Linton, 2000). Eventually, these cognitive and behavioral processes lead to significantly diminished physical functioning and an increased risk of depression and chronic disability (Lethem et al., 1983; Crombez & collègues, 1999).

Although numerous patient-reported questionnaires have been established to assess fear avoidance, existing measures have faced substantial criticism regarding their psychometric properties. Specifically, concerns have been raised about restricted construct validity, inadequate item specificity, the absence of clinically meaningful cutoff scores, and the omission of key fear-avoidance components (Waddell et al., 1993; Leeuw et al., 2007). Instruments such as the Fear-Avoidance Beliefs Questionnaire (FABQ) and the Tampa Scale for Kinesiophobia (TSK) have been widely used, yet they often fall short in comprehensively capturing the multifaceted nature of fear-avoidance behavior.

In response to these shortcomings, the Fear-Avoidance Components Scale (FACS) was developed as a novel patient-reported outcome measure. The FACS integrates critical elements assessed by previous FA tools while systematically addressing their methodological limitations (Neblett et al., 2016). Grounded in the most current theoretical frameworks of fear-avoidance, the FACS aims to provide a more comprehensive, precise, and clinically actionable assessment of FA-related dysfunction in individuals with pain disorders.

Individuals have varying ways to respond to pain. We are going to see how you think and feels about your painful medical condition and what impact it has placed on your level of activity. Please reflect on how you have been over the last week, and circle one number between “0” and “5” from the scale below to answer each question. 5 = Completely Agree 4 = Mostly Agree 3 = Slightly Agree 2 = Slightly Disagree 1 = Mostly Disagree 0 = Completely Disagree. Item includes such as, I try to avoid activities and movements that make my pain worse, I worry about my painful medical condition, I believe that my pain will keep getting worse until I won't be able to function at all, (Questionnaires are attached in Appendix A). Start each of the following items with this statement: Over the past week, due to my painful medical condition I have avoided, such as ...strenuous activities (like doing heavy yard work or moving heavy furniture) ...moderate activities (like cooking dinner or cleaning the house).

## **CONCLUSION**

A Prisma-based analysis of the avoidance of decision-making lead to the result, that the avoidance stems from factors like Emotional and Cognitive Factors, Personality Traits, and the Impact on Individual and Organizational Outcomes. Other factors are Anxiety, Reward Conflict, and Pain. Based on the theoretical foundation, measuring instruments were analyzed from Scott and Bruce (1995), Mann et al. (1982) and Launer and Cetin (2023, 2025). For the measurement of avoidance due to pain, the Fear-Avoidance Components Scale (FACS) by Neblett et al., (2016) was introduced. The analysis shows, the avoidance of decision-making is an important scale to measure rational and intuitive decision-making.

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