From Anticipation to Resignation: Emotional Trajectories in a Short-Term Trading Simulation

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Abstract

This study investigates the emotional dynamics experienced by eight participants (students) in a three-day simulated stock trading environment, drawing insights from semi structured interviews. The analysis reveals an evolution of key emotions throughout the experiment, driven primarily by performance, market conditions, and competitive pressure. Participants generally began with positive anticipation and optimism, viewing the simulation as a valuable learning opportunity. Some initial surprises regarding market volatility were also noted. On the second day, the experience often intensified emotionally. Happiness emerged following successful trades. However, anger (due to frustration) and sadness significantly increased, mainly attributed to unexpected losses, poor market timing, or an inability to manage strategies effectively. Fear became prominent, strongly linked to managing losses and the pressure of the real-time ranking. The final day showed a peak of negative emotions. Frustration persisted, sometimes escalating to disgust due to important losses or market immobility. In short, resignation became common as participants faced circumstances beyond their control. While financial optimism declined for most of the participants, a kind of "resilient optimism" regarding the value of learning experience and acquiring practical skills. The article will be structured as follows: in the first section, we introduce our research topic. In the second section, we consider the connections between emotions and decision-making process. In the third section, our methodological approach is described (including data analysis, experimental design, participant profile and market context, interview structure and emotions analyzed and a summary of key experimental elements. The fourth section will present our results. The fifth section will be dedicated to analyzing them. A concluding section is presented, and the last section provides some limitations and suggests avenues for further research.

Keywords: Behavioral Finance, Decision-making, Emotions, Qualitative Analysis, Experimental Finance, Simulation.

1. Introduction

Stock markets, characterized by inherent volatility, rapid information flow, and significant potential for gains and losses, provide an environment for studying human psychological responses (Allain, 2013 ; Goodell et al., 2023 ; Dhingra et al., 2024 ; Tian, 2024 ; . While traditional economic models often assume rational decision-making, a growing body of research highlights the substantial influence of emotions on trading behavior (So et al., 2015 ; Gabbi & Zanotti, 2019). Understanding the dynamic interplay of emotions experienced by individuals in these complex environments is crucial for developing more comprehensive models of financial decision-making and for assessing risk management strategies.

This study focuses on the emotional evolution of participants engaged in a three-day simulated stock trading experiment. The topic of changing emotional patterns is very rarely addressed in financial literature (Finet & Laznicka, 2025). From qualitative insights collected through semi structured interviews, we explore how participants' emotions changes over the three-days simulation and identify the key factors that could explain them. The simulation context, while not involving real money, is designed to replicate the pressures and uncertainties of actual trading, including exposure to market fluctuations, performance tracking through rankings, and time constraints. The controlled immersive set up results in an examination of emotional trajectories that might occur rapidly in real-world trading. Our analysis reveals a significant shift in the emotional states experienced by participants from the beginning to the end of the three days.

The objective of this article is to provide a nuanced qualitative picture of emotional trajectories, showing how emotions like anticipation, frustration, sadness, fear, disgust, and resignation evolve over the course of a short-term simulated trading experiment. By analyzing the participants' direct statements, we aim to contribute to a better understanding of the psychological challenges in financial decision-making under conditions of uncertainty and time pressure, and how these challenges change with an individual's experience. The insights derived from this study have implications for financial education, psychological support for traders, the design of future trading simulations and to further develop and refine some working hypotheses of behavioral finance (Xia & Madni, 2024).

2. Emotions and Decision-Making : State of the Art

The influence of emotions on decision-making has been widely studied. Lerner and Keltner (2000) show that emotions such as fear and anger have different effects on judgement: under the influence of fear, individuals tend to judge future events in a pessimistic way and are less inclined to take risks (Schulreich S. et al., 2016), whereas under the influence of anger, they tend to judge them in an optimistic way. Anger leads to risky decision-making and taking positions on the stock market (Gambetti E. and Giusberti F., 2012). Angry people are said to be more like happy people than fearful people (Lerner J. and Keltner D., 2001). Conversely, Habib M. et al. (2015) show that anger reduces the propensity to take risks, while fear has a positive influence on it. Lerner J. and

Tiedens Z. (2006) note that the influence of anger on decision-makers is more complex than might be expected at first glance: angry decision-makers experience negative emotions about past events, but they also have optimistic expectations when it comes to predicting the probability of future success. Isen (2000) also demonstrated experimentally that people in a positive emotional state are more risk-averse than those in a negative or neutral mood. It also appears that a positive emotional state facilitates complex decision-making by reducing confusion and increasing the ability to assimilate information. By combining methods from psychology and economics, Lerner J. et al. (2013) revealed that sadness is not necessarily synonymous with good financial judgement. On the contrary, sadness – but not disgust – makes people more myopic and willing to give up greater future gains for instant gratification.

In short, emotions can be seen as a step before action, so they're like information about how much value someone puts on sharing information: specific emotions will lead to specific effects, and emotions can also change how people think (Clore G., Huntsinger J., 2007). The aim is therefore to establish links between specific emotions and associated actions. On the one hand, a positive mood will be associated with positive assessments of the effectiveness of the decision taken and the perception of the consequences, as well as a shorter decision-making time (Gorgievski M., Van Delden M., 2008, Meghana J. and Rinju G., 2019, Deurkar P. et al., 2021), with the economic agent in a good mood being comparable to a person who feels richer than he or she actually is (Kessler J. et al., 2022).

In the specific field of trading, the links between trading and emotions are a relatively unexplored area of research, except for a largely descriptive and preventive approach. On this topic, Conlin A., et al. (2015) demonstrate that exploratory excitability (the desire to avoid periods of boredom), impulsiveness (making decisions with partial information), and extraversion (spending rather than saving) are systematically linked to participation in the stock market. Furthermore, they also show that fear of uncertainty is negatively linked to participation in the stock market. Similarly, investment decisions appear to be driven or triggered by emotions (excitement, anxiety and denial), which tend to demonstrate the key role of the inner world in better understanding market dynamics (Taffler R., 2014, Schunk D. and Betsch C., 2006).

Baker M. and Wurgler J. (2007) show that it is possible to measure investors' emotions and that waves of emotion have clearly detectable, significant and regular effects on individual companies and on the stock market as a whole. In particular, stocks that are difficult to value are most affected by emotions. According to them, the investor emotion approach faces a number of challenges: accurately identifying and measuring investor emotions, understanding their underlying causes and how they change over time, and determining which stocks attract investors.

Anh Y. and Kim D. (2023) show connections between the emergence of visceral emotions (defined as emotions that are felt very deeply and are hard to control) and price dynamics in the cryptocurrency market, leading to suboptimal behavior.

The study by Gabbi G. and Zanotti G. (2019) found that when a positive emotion develops at the same time as a negative emotion, the positive emotion tends to dominate and generates optimistic expectations and risk-taking behavior. Based on an experiment conducted with non-professional traders to identify a potential relationship between emotional state and attitudes towards financial choices, Gabbi G. and Zanotti G. (2011) measured individuals' personality traits and socialization attitudes and used these variables to explain a financial decision-making context. Certain variables appear to be particularly important in explaining trading decisions: for example, expectations for the current day and the desire to build social relationships could explain the tendency to make particular decisions.

Vamossy D. (2021) studies the impact of investor emotions on earnings announcements. In particular, the author examines the extent to which the emotional content of company-specific messages posted on social media just before a company's earnings announcement can predict the results and returns associated with the announcement. Investors are generally enthusiastic about companies which ultimately exceed expectations, but their enthusiasm translates into lower returns at the time of the announcement. The results confirm that emotions and market dynamics are closely linked and highlight the importance of taking investor emotions into account when assessing a company's short-term value.

From the study by Duxbury, D. et al. (2020), based on an analysis using experimental finance, there appears to be an asymmetry in the way fear varies with price increases and decreases. For some participants in the experiment, fear and hope increase when prices rise, while fear increases and hope decreases when prices fall. One explanation could be that price volatility influences the fear of losing more than the hope of winning.

The studies mentioned above demonstrate links between emotions and decision-making (particularly in the field of trading) but do not necessarily consider their distinct influence depending on how they change over time, which will represent the main contribution of our study.

3. General Methodological Approach

Our article uses a qualitative and inductive methodological approach, a method still relatively uncommon in finance, which has traditionally favored quantitative and deductive techniques (Hoffmann et al., 2015; Della Vedova et al., 2023; Oehler et al., 2018). Given the nature of traders' emotions, qualitative approach provides valuable insights. Quantitative methodologies often struggle to capture the detailed nuances of decision-making, the underlying emotional dimensions, and the role of intuition. In contrast, qualitative methods enable researchers to cover unexpected influences that are difficult to access through quantitative tools. This immersive qualitative approach thus lays a foundation for theory development based on lived experiences, allowing for the assessment of context-specific behavioral mechanisms crucial for a deep analysis.

In qualitative research, the aim isn't to statistically generalize findings to a larger population, but rather to achieve a deep understanding of a specific phenomenon within

a defined context. This typically involves collecting data from a small, purposively selected sample, chosen for its relevance to the research question (Firestone, 1993; Maxwell, 1992).

For this study, an experimental protocol involving three consecutive days of simulated trading was conducted in January 2025 with a group of eight students. Following this phase, individual semi-structured interviews were carried out by a single researcher to ensure consistency. Importantly, the researcher had no academic ties to the participants (meaning they weren't subject to her evaluation), which encouraged open responses. The immediate sequencing of the interviews after the trading sessions also helped establish a degree of familiarity, enriching the conversations.

3.1. Data Analysis

In terms of data analysis, the narrative approach (as outlined in Creswell and Poth's (2017) five qualitative tools) was selected, as other approaches (case studies, ethnography, phenomenology, and grounded theory) were not aligned with the article's objectives. Narrative research focuses on affective and experiential dimensions, often involving the reconstruction of participants' stories through the thematic identification of key elements. This analytical process includes memo-writing, contextual description, and interpretive engagement with personal narratives.

The semi-structured interviews were guided by a framework consisting of several sets of open-ended questions, each addressing specific themes related to emotional patterns. This interview guide allowed for flexible navigation of topics and facilitated the dynamic adaptation of the interview based on participant responses. Such flexibility is essential in qualitative research for an in-depth exploration, maintaining alignment with the research design, and supporting responsiveness to unexpected insights that may emerge during the interaction. In this context, the guide functioned as a flexible structure rather than a restrictive protocol (Whiting, 2008).

For the analysis of the interview data, a thematic analysis was employed. This method is well-suited for participatory research and enables the identification of both commonalities and differences across the dataset, while also allowing for the emergence of unanticipated insights (Vaismoradi et al., 2013; Nowell et al., 2017). The analysis followed the six-phase procedure proposed by Braun and Clarke (2006), Byrne D. (2022), Bingham, A. J. (2023), ranging from data familiarization to the production of the final report, thereby addressing common critiques in qualitative research (Özden, 2024). Each interview was summarized by dominant themes, representative codes, and illustrative statements. Themes to be analyzed are emotions (Dependence on the Declining Stock Market) and impact on decision-making.

All interviews were audio-recorded with participants' consent, fully transcribed (see Table 2 for interview data), and analyzed by the three authors of this study. The use of artificial intelligence was deliberately excluded, as current technologies are not yet capable of fully grasping the complexities involved in emotional-related reasoning (Finet et al., 2025).

3.2. Experimental Design

Our initial investigations into how emotions affect decision-making began in 2019 (Finet et al., 2022). The challenges brought by the COVID-19 pandemic and subsequent lockdowns, which made empirical experimentation especially difficult, led us to refine and adapt our experimental protocols (Finet & Laznicka, 2025).

Participants traded equities individually through the ABC Bourse platform, focusing exclusively on stocks listed on the CAC40, France's main stock market index. Each participant was given a virtual portfolio of 100,000 euros. We chose the CAC40 assuming its constituent companies would be relatively familiar to the participants. There were no limits on trading volume. The experiment spanned three consecutive days (January 27–29, 2025), divided into twelve one-hour sessions. To simulate the pressure often found in real-world markets, participants could access real-time data showing their peers' portfolio performance.

We paid close attention to the composition of the initial portfolio. Previous studies suggest that an initial portfolio fully invested in equities can amplify risk-taking tendencies, while an initial cash allocation encourages more conservative behaviors, regardless of market conditions (Finet et al., 2021; Finet et al., 2025).

The experiment was conducted at the University of Mons (Belgium) and involved students enrolled in Management Science programs. We focused on recruiting participants based on intrinsic motivation rather than financial incentives, and we imposed no fixed deadline for applications to encourage voluntary participation. The final sample consisted of eight participants (seven men and one woman), a size determined by both budgetary constraints and the labor-intensive nature of qualitative data analysis. Participants were financially compensated for the 24 hours of trading activity over the three-day experiment. The predominance of male participants is consistent with what it is documented in financial literature and is often linked to a greater male propensity for risk-taking or gambling behaviors (Barber & Odean, 2001; Cueva & Rustichini, 2015; Bashir et al., 2013).

3.3. Participant Profile and Market Context

Although experimental finance sometimes faces criticism for relying on student samples (who could differ psychologically from professional traders) this choice remains widespread due to advantages in recruitment ease, cost-effectiveness, and time efficiency (Etchart-Vincent, 2006; Kirchler, 2009; Hanke et al., 2010; Bouattour & Martinez, 2019). To address concerns about limited real-market experience, we integrated several considerations: first, participants had completed academic coursework in finance, providing them with some basic knowledge. Second, empirical research demonstrates that students can exhibit behavioral patterns and judgment capacities similar to professionals (Porter & Smith, 2003; Fréchette, 2011), particularly in tasks like option pricing (Abbink & Rockenbach, 2006). Consequently, the use of student samples is both common and accepted within experimental finance and behavioral economics (Rossignol et al., 2007; She et al., 2017; Ackert et al., 2005; Biais et al., 2005; Bruguier et

al., 2010; Widyarini, 2017). To reinforce participant engagement, a non-monetary incentive—specifically, a 200 euros-value hotel stay awarded to the top-performing portfolio—was offered, in line with findings regarding the motivational impact of non-cash rewards in experimental settings (Etchart-Vincent, 2006; Gabbi & Zanotti, 2019). Thus, participant motivation combined direct compensation for time and a performance-based prize.

The experiment took place in a market characterized by a slightly negative trend in the CAC40 index, as detailed in Table 1. Comparative data on the Dow Jones Industrial Average (DJ30), NASDAQ 100, and TOPIX are also presented to provide broader contextualization. While the CAC40 faced only marginal losses, participants exhibited notable concern about the decline in their portfolio values, even when such losses were consistent with overall market trends. This negative perception may have fostered the development of specific behaviors (Xu et al., 2022; Sokolowska & Makowiec, 2017).

Several significant informational events shaped the market environment during the experiment. On the first day, news coverage was dominated by developments concerning DeepSeek, a Chinese firm emerging as a rival to American companies in the Artificial Intelligence sector. The second day continued to be influenced by news related to DeepSeek and its potential implications for U.S.-based AI firms. On the third day, investor sentiment was affected by LVMH's annual earnings report, which underperformed relative to expectations. Finally, the U.S. Federal Reserve's announcement on January 29th—that interest rates would remain unchanged—was widely anticipated and exerted minimal surprise.

Index	01.27.2025	01.28.2025	01.29.2925	Total Change
CAC40	-0.0003	-0.00012	-0.0032	-0.0036
DJ30	0.0065	0.0031	-0.0031	0.0065
NASDAQ 100	-0.0297	0.0159	-0.0024	-0.0162
ΤΟΡΙΧ	0.0026	-0.0004	0.0068	0.009

Table 1. Evolution of CAC40, DJ30, NASDAQ 100, and TOPIX over the ExperimentalPeriod

3.4. Interview Structure and Emotions Analyzed

Following the three-day trading sessions, semi-structured interviews were conducted using a three-phase interview guide. The first phase consisted of general, introductory questions about the participants and their interest in trading. However, given the relations already established during the experiment, this phase often proved redundant, allowing the discussion to quickly pivot toward the study's core focus. The second phase explored the development of decision-making biases observed during the trading sessions. The interview guide was structured around emotions. Emotions were identified in the interview transcripts and categorized according to the classification of Harmon-Jones et al. (2016): anger, fear, sadness, disgust, anticipation, happiness, surprise and optimism.

The final phase of the interview allowed participants to share additional reflections or raise topics not previously addressed.

3.5. Summary of Key Experimental Elements

In summary, this experimental study was characterized by the following key elements, which form the basis of our analysis:

- A three-day trading simulation within the French stock market context.
- A sample composed predominantly of male university students.
- A market environment perceived as generally declining.
- A performance-based reward offered to the participant with the highest portfolio return at the end of the experiment.

4. Results

Table 2. Statistical Summary of Semi-Structured Interviews

Student	Duration	Number of Words	Number of Pages
l.1.	42 minutes	4466	10
1.2.	42 minutes	6827	12
I.3.	59 minutes	7922	14
1.4.	43 minutes	7492	12
1.5.	42 minutes	5949	12
I.6.	36 minutes	6124	11
l.7.	36 minutes	5946	11
l.8.	33 minutes	5577	10
Mean	42 minutes	6288	11,5
Maximum	59 minutes	7922	14
Minimum	33 minutes	4466	10
Standard Deviation	8	1102	1,3

For our results, we are presenting the data collected from each participant, with the main topic being emotions and the codes that correspond to specific emotions. We're also including the associated statements and a short descriptive explanation.

Day	Emotion	Statements	Descriptive Explanation
Monday	Code :Positive	"Trading on a personally,	Interest in trading and the
	Anticipation,	and that's it, the whole	opportunity to get some
	Happiness	environment, the whole	experience.
		sphere, really interests me	
		and I'd love to do it later on,	
		maybe even make it my	
		career."	
		"So it was really for the	
		experience, to acquire	
		experience, and to gain	
		even more experience, and	
		that's it, that's all there is to	
		it, more experience, that's	
		what interests me a lot."	
		'And even though I generally	
		like new experiences, I was	
		happy.'	
Tuesday	Code : Happiness	'Happy and proud of	The participant
		yourself. To say to yourself,	experiences gains, which
		"This is what I've read, this	generates happiness and
		is what I've seen, this is how	pride.
		I interpret it, and this is the	
		decision I've made." If you	
		make a good decision,	
		you've made a good	
		personal interpretation, so	
		you're happy.'	
		'I was very proud, very	
		happy. I mean, I was able to	
		do the right things	
		compared to the others.	
		'At one point on Tuesday,	
		everyone was losing, but I	
		was winning. I was the only	
		one winning.'	
	Code: Anger	"No, not irritated. But yes, it	Anger and frustration rise
	(frustration)	is frustrating."	when he realizes that he
			anticipated the market
			correctly but acted too
			soon.

Table 3. Emotional Analysis of the Participant I.1. Through Daily Trading Activities

		'It's not enough knowledge. That's why I'm studying now. It's because I want to learn more. And also, here, it was a question of timing. When to get in, when to get out.'	
Wednesday	Code : Disgust	'And on Wednesday, it was even more than disgust.'	More intense emotions, with the emergence of disgust, due to bad decisions
		"Disgusted. I think to myself, what a shame. Because we can come back in an hour, but if I had removed it as I should have done, without complaining or anything, I would feel so much better."	
		'Because when you look at it, for example, it represented a loss of less than 800, and in total, I was down 700. So if I had removed Kering as I was supposed to, I would have been up 100.'	
	Code : Anger (frustration)	'If it was a loss I hadn't anticipated, it's frustrating, but that's all. If it's something I had planned and forgot, it's more than frustrating. It's more frustrating and makes you feel disgusted. And you start thinking, "If I had done this, if I had done that."'	Anger remains, especially with unexpected or poorly managed losses.
	Code : Fear	'Yes, it's true that with this ranking system that updates every hour, when it's 2:59 p.m., we feel stressed thinking that we're being ranked against others. That's normal.'	Real-time rankings and the fear of losing one's position or not moving up are significant sources of fear.
		"I'm someone who gets stressed easily. So yes, personally, I always feel a little stressed. I've moved up, I've progressed."	

	'Yes, that's right. If we're ninth or tenth, we can't go any lower. But on the other hand, that's the hardest part. It's really, as I was saying, when everything is going well and we're second, first or third, we tell ourselves we have to keep up the tempo and try to make the best decisions, so we don't drop down the rankings.'	
	'So in both cases, you feel stressed. When you're at the bottom of the rankings, you're stressed because you want to move up. And on the other hand, when everything is green, you're stressed because you absolutely want to stay at the top of the rankings.'	
Code : Optimism	"No, that's right, I tried anyway. Because I don't want to remain in this situation. I don't want to be in this situation where I can't do anything. I don't like it. So no, I sold some shares at a loss to buy others, to try and get the price up."	Despite feeling disgusted, the participant does not stop and tries to recover, demonstrating some underlying optimism.
	When it comes to poor performers shares, he tends to hold on to them, 'because you tell yourself that they'll go up a bit.'	

Table 4. Emotional Analysis of the Participant I.2. Through Daily Trading Activities

Day	Emotion	Statements	Descriptive Explanation
Monday	Code : Anticipation	'I still tried to keep up with the news a bit. I looked at what was going on. And I looked at companies a little. But I set myself a limit. I said, "I'm not going	The participant begins with a process based on information and analysis.

		to buy any shares that are above €500."	
		'I tried to look a little at what was happening in terms of company valuations as well. And basically, yes, it's still reflected in the market. So I did all that. I tried to analyse it a little.'	
Tuesday	Code : Happiness	"It's true that on Tuesday, I was in positive at the very beginning, I was at plus 500 and something, and then when you see that you're falling a little bit"	The participant appears to have experienced gains, generating happiness and pride, although the potential loss is still ever-present in the background.
		"Yes, it's fun. But what's quite challenging is staying on track and not getting too greedy and not being too"	
		'I went back up to 400 euros after losing 1,000 euros in the middle.'	
	Code : Surprise	"The news on Tuesday surprised me. I had a stock that was trading at 6.50 euros, and the news that came out wasn't even about that stock, it was just general news, and all social media and all companies were hit hard."	Surprise is mentioned, but not necessarily linked for a gain or loss, rather to market behavior.
Wednesday	Code : Anger (frustration)	"And then, it's not really anger, but frustration, yes."	Negative emotions, particularly frustration/anger and sadness, are more prominent due to losses. The participant tries to manage them but experiences significant difficulties.
		"It's the anger because you don't know why it's not	

	going up, or you feel like	
	you've got the right	
	analysis, and the market is	
	proving you wrong."	
	'Yes, that's right. We don't	
	actually have the keys.	
	When we want to change,	
	we don't have the keys, we	
	don't have the market for	
	It. That's what's quite	
Codo : Sodraco	Illustrating.	
Code : Sauriess	And when things went	
	And when things went	
	wrong, I started to really	
	Cost track. I said to myself,	
	OK, I'm going to sell this	
	stock." But actually, ho, it	
	cost me more. And then,	
	when I sold all my shares, I	
	said to myself, "OK, I'm	
	going to buy this, it's going	
	to go up, it's going to go	
	up." But actually, no, it	
	didn't go up."	
	"The sadness of not being	
	able to influence the	
	market leads to a feeling of	
	disappointment."	
Code : Fear	'I had a share that was	Time pressure and the
	worth 20 euros. I thought	fear of losing more
	to myself, "OK, I can't leave	influence his decisions.
	it like that, time is passing,	
	l have three days." If I had	
	time, it would be fine. But	
	there's a deadline, we have	
	to be ranked.' (Fear of	
	wasting time, stress about	
	the deadline and the	
	ranking)	
Code : Optimism	'Afterwards, when I sold all	Even with losses, there's
	my shares, I thought to	always a chance to make
	myself, "OK, I'll buy this,	a comeback, even if it
	it'll go up, it'll go up." But in	doesn't always work out.
	فمريد معطاماته المشام فلمعا	

Day	Emotion	Statements	Descriptive Explanation
Monday	Code : Anticipation	'On Monday, I wanted to	Participant starts with an
		buy a share that was worth	action plan and try to
		20 euros. But then I said,	predict what the market
		"No, that's too expensive	will do. The focus is on
		for me." I'll buy some	following the plan (or not,
		shares that are cheaper. So	which makes them angry
		l bought a share worth 5	right away). He also has
		euros.'	to deal with unexpected
			events.
		'Yes, it was a bit shocking.	
		But I saw the potential. I	
		don't know the name of the	
		company. But basically, it	
		was a share that was worth	
		5 euros.'	
	Code : Anger	'And then, that wasn't the	
	(frustration)	right plan, because I said,	
		"I'm not going to respect	
		my emotions." And in the	
		end, I started trading	
		based on emotion.'	
		"Then I saw that it had	
		increased by 200%, so I	
		decided to sell.	
		Afterwards, I wanted to buy	
		it back, but the price had	
		increased by €1."	
		'And I sold all my shares,	
		and then the price went up	
		again. So I said to myself,	
		"No, that's it. I'm not	
		buying any more today."	
Tuesday	Code : Anger	'And then I saw another	Strong anger and sadness
	(frustration)	stock, I bought it, and	related to loss. Fear of
		actually, no, it didn't go up.'	loss was present.
		"The frustration of seeing	
		that you've lost money and	
		there's nothing you can do	
		about it, because vou can't	
		buy the shares, nor can	
		you pay the price to buy	
		them."	
	Code : Sadness	'It was a day when I lost a	
		lot. And I was really feeling	
		, 0	

Table 5. Emotional Analysis of the Participant I.3. Through Daily Trading Activities

		my emotions come into play. I felt sad. I said to myself, "OK, I'm going to cut my losses. I'm going to take the action that's at - €500. I'm going to sell it, and then I'll buy another	
		one."	
	Code : Fear	"Yeah, there's the loss, And	
		also, I'm thinking about my ranking. I'm 1,000 euros down. Will I be able to win back what I've lost? I'm in last place. That's it. Stress."	
		'So I have to stop losing, I	
		that's harder to manage	
		than winning, when you're losing. Because when	
		you're winning, it's easy.'	
Wednesday	Code : Anger (frustration)	"No, I couldn't get back in. Because of what I did last night, I sold my shares. I bought a share for €2 overnight. And in the morning, it was down to - €1. So I thought, "Oh no." And I waited and waited and waited. And it went up a little. I sold at -€1.	Continuation of anger (frustration), likely intensified by the inability to recover. There is some level of acceptance of the loss.
		'It's frustration. I don't know why. The market, I don't know why. We can't do anything about it	
		'No, I'm not upset. It's just frustration. I said, "OK, I'm going to stop losing." So I sold all my shares and said, "I'm not going to let the market hit me like that. I'm going to stay neutral."	
		"Yes, that's right. It's more frustration. It's an emotion that's associated with that. I'm not going to go there."	

Day	Emotion	Statements	Descriptive Explanation
Monday	Code : Positive Anticipation (optimism)	"I had a fairly clear idea of what to expect. And I had goals to meet.'	Anticipation and optimism are the main emotions. Anticipation is linked to the opportunity to explore a new side of investing, and optimism comes from believing that this experience will be good for personal and financial development.
		If we start, I'm at the very beginning, I invest 100 euros, I set my winnings at 20 euros. And I'm not going to be too ambitious, so I don't lose everything "	
		'Quite simply. First of all, it's also the world of stock market investment. So I was already very interested in it. I've invested on my own, but not necessarily in the stock market, but it's something I wanted to develop further.'	
		'I thought to myself, if it can help me discover another side of stock market, why not?'	
Tuesday	Code : Anger (frustration)	 'If it drops again, it won't bother me. However, if I haven't been able to recover my losses, then yes, I'll be frustrated.' "It happened very quickly and suddenly it turned against me." 	Increase in anger and sadness due to unexpected losses, but also an effort to manage these emotions by adjusting his strategy. The fear of losing is more pronounced.
		'Frustration is much more intense when you have a clear plan, and it turns against you. That's when	

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	Codes : Frustration/Sadness Code : Sadness	you really feel frustrated. Because you've analysed the situation well, you have good intuition, and in the end, it turns against you. That's when you ask yourself, "Why?"' 'You're frustrated. And then, the second emotion, I would say, is sadness.' "Tuesday didn't go very well. There were a lot of reds. It's part of the experience I wanted to	
		have."	
Wednesday	Code : Anger (frustration)	"There was frustration today, but I dealt with it much better."	On Wednesday, anger persists, but the participant seems to be developing a form of acceptance and a desire not to let emotions take over. Optimism is focused on learning and managing emotions in the future. Fear is still present.
		"I have to do something,	
		I'm going to take quick	
		stock and sell it at the first rise."	
	Code : Fear	'When you're losing, there's more stress.'	
		"But when you're losing,	
		you feel the pressure of	
		time. So you say to yourself 'We absolutely	
		have to get back in the game."	
	Code : Optimism	'I'm still very optimistic about the experience itself. It hasn't discouraged me at all. No, no, not at all.'	

Table 7. Emotional Analysis of the Participant I.5. Through Daily Trading Activities

Day	Emotion	Statements	Descriptive Explanation
Monday	Code : Fear (of losses)	'I collected all the information I had and then decided what was the safest option.'	Monday seems to be a day for learning and observation. Participants make decisions based on the information available. There is an anticipation of market movements and an information-based approach. The fear of loss is managed through caution and by setting limits.
	Code : Fear	'I said to myself, 'I'm not going to put all my money into one, into a single stock, I'm going to diversify. And I saw the ones that were still undervalued.' "As soon as I lost, I said to	
		myself, 'I have to stop. I have to get to a specific level."	
Tuesday	Code : Anger (frustration)	If it drops, there's nothing I can do.''I couldn't get up there. It's frustrating.'	Tuesday is the day when anger and sadness in response to losses are most prevalent. Participants also express fear related to ranking.
		'We get angry. I got angry. Because I said to myself, "You have time to do it. You could have done it yesterday. Why didn't you do it yesterday?"	
		"There's time pressure and there's pressure to perform well. So that creates stress. It makes you nervous."	
	Code : Sadness	'When you see that things aren't improving and you can't make a decision, you just stand there, watching, feeling frustrated and sad.'	
Wednesday	Code : Sadness	"I told myself, 'There's nothing you can do now,	Wednesday is characterised by feelings

	because it's the last day,	of despair and
	and you've checked the	discouragement in the
	stock market, there's going	face of market
	to be no miracle." You try to	stagnation, leading to a
	figure out a strategy. We	sense of resignation.
	tried in the morning, and I	Anger and sadness
	don't think it was the only	persist, but there is also
	one. We were all	acceptance of the
	discouraged and	situation. Optimism
	demotivated because	shifts towards future
	nothing was happening.'	learning rather than
		immediate gain.
	'Because we're all in the	
	same situation. I hope.'	
Code : Anger	'No, not anymore. At first,	
(resignation)	we were angry because we	
	thought, "It's our money,	
	after all." But then we	
	thought, well, it's an	
	experience, there are ups	
	and downs.'	
Code : Optimism	"I'm very proud. It gave me	
	valuable skills. It's just that	
	I wasn't lucky enough to do	
	well in the stock market."	

Table 8. Emotional Analysis of the Participant I.6. Through Daily Trading Activities

Day	Emotion	Statements	Descriptive Explanation
Monday	Code : Anticipation	'At first, I thought I would diversify a lot. I would have bought seven or nine, I think I would have bought nine, in three different pieces. But then, there were only micro- gains'	The participant adopts a diversification strategy, seeking 'micro-gains'. They are initially in a phase of observation and application of their strategy. Anger and fear of loss are present but managed.
	Code : Anger	"Yes, when I saw a red	
	(frustration)	score, it frustrated me."	
	Code : Fear	"Yes, straight away, I cut."	
		'But I didn't say to myself,	
		'OK, now I'm going to buy	
		that.' I just kept cutting,	

		cutting, cutting, cutting.	
Tuesday	Code : Anger (frustration)	"I said to myself, 'OK, I'll take my profits. And it kept going up.'"	Tuesday is an emotionally intense day, with the situation deteriorating rapidly. Frustration/Anger becomes a major emotion, associated with Sadness and Fear in the ranking. Surprise is also present in response to the size of the losses.
		'And that frustrated me enormously. Then I said to myself, "OK, I have to get back on track." I put everything into one stock. And then it all came crashing down.'	
		"It's frustrating to see that, if you're losing money, you feel like you can make decisions, but you can't get back into the green. It's frustrating."	
	Code : Fear	'At the end of the day, I was still stressed about the rankings.'	
	Code : Sadness	'Tuesday was a bit more of a disaster.'	
		'Yes, it makes you sad to see that we have the ability, and we can't use it, because it's a matter of timing; you can't take an action and let it run for days.'	
Wednesday	Code : Sadness	'And then, in the morning, it was even worse. Well, the last day, yesterday. That was the worst.'	Wednesday is the day of resignation in the face of a situation that is considered hopeless. Anger persists, but is tempered by a form of acceptance. Optimism turns towards learning lessons for the future.

Code : Anger	"Yes, at that point, I
(frustration)	actually had a 3%
	difference, which was not
	possible. But up until
	then, you told yourself,
	"Come on, I believe in it, I
	hope it will change." When
	there's a small gap, like
	1%, 1.5%, I told myself
	that with a lot of luck, it
	might work, but at that
	point, I knew it wasn't
	possible."
Code : Optimism	'Yes. It was a great
	experience. I was very
	happy to do it. Even
	though I lost, I'm glad I did
	it.'

Table 9. Emotional Analysis of the Participant I.7. Through Daily Trading Activities

Day	Emotion	Statements	Descriptive Explanation
Monday	Code : Surprise	"The most dramatic moment, I would say, was on Monday, when LVMH crashed."	Monday is dominated by feelings of surprise and frustration in response to unexpected events.
	Code : Anger (frustration)	"So, it did make me a bit frustrated at the time." (facing an unexpected and rapid loss)	
		'Yes, just at that moment. Afterwards, I thought to myself, "Well, these things happen. Just because there was a crash doesn't mean it's over." So I decided to give another chance.'	
		'It crashed again afterwards. I said to myself, "I can't leave it now." So I cut it off.'	
Tuesday	Code : Anger (frustration)	'I tried to do things but it wasn't working, and that's frustrating.'	Tuesday is a day of anger, related to the pressure of

			the rankings. Sadness also appears.
		'I was trying to get by and I couldn't. So it frustrated me.'	
		He mentions that he 'tried to buy shares that are cheaper so that they will rise again more quickly'.	
	Code : Sadness	If it doesn't go up, if it goes down again, it doesn't bother me. However, if I can't do anything about it and I can't get up again, then yes, it frustrates me. It even makes me sad."	
		"On Tuesday, I was still losing money."	
Wednesday	Code : Anger (frustration)	It's still frustrating not to be able to do something."	Wednesday is dominated by Resignation in the face of a lack of change in the market, which reduces Anger, giving way to a form of Acceptance. Optimism turns towards learning patience.
	Code : Anger (resignation)	'You get angry at first, and then you say to yourself, "Well, that's just the way it is."'	
		"You have to tell yourself that these things happen"	
	Code : Optimism (learning experience)	'It's very much a question of patience. I feel that when you trade, you can't be impatient. You really have to be patient for it to work.'	

Table 10. Emotional Analysis of the Participant I.8. Through Daily Trading Activities

Day	Emotion	Statements	Descriptive Explanation
Monday	Code : Anger (frustration)	'But it frustrated me enormously because I immediately felt	Monday is marked by feelings of inadequacy and anger related to his

		inadequate. So I read a book to learn how to manage my emotions.'	lack of knowledge and comparisons with other participants. The fear of losing or doing badly is also present.
		'Well, frustration, all the time.'	
	Code : Fear	"I had a rule that I would only invest in things that were safe and read everything very carefully so that I didn't do anything stupid."	
		"Yes. I tried not to do anything, not to touch anything. I only bought one share worth 20 euros. And then I sold it."	
Tuesday	Code : Anger (frustration)	'But we think, since nothing is happening on the market, we can't make a decision.'	Tuesday is a continuation of feelings of anger and inexpertise. The sadness associated with losses and powerlessness in the face of the market intensifies. Fear is accentuated by the pressure of the rankings.
		'When there's nothing, I	
		feel frustrated.	
		can't make a decision.'	
	Code : Sadness	"I was still losing money."	
		'It makes me a little sad to see that you feel like the situation is hopeless.'	
	Code : Fear	'So we say to ourselves, we're going to lose. And so the goal is to minimise the loss. Not to recover.'	
		'Yes, there's time pressure and there's pressure from the rankings. It just stressed me out. I was stressed.'	

Wednesday	Code : Anger (resignation)	"Yes, because I was at - 3% at the end of the thing, so I figured it was a lost cause, I was never going to get back up again."	Wednesday is the day of total resignation. Frustration and sadness culminate in a feeling of "it's all over". The optimism of learning remains the only light at the end.
		'I would have tried, I would have used Excel, I would have tried to calculate the expected returns, I would have done exactly what we were taught to do to see what happened.'	
	Code : Disgust	'At that point, it was all over, I was never going to get back up again. And I said to myself, I have to try doing things that don't go well, but at least it won't cost me anything'	
	Code : Sadness	"Yes. Well, when the US market was about to open. So I thought there might be some moves, and in the end, I checked, but nothing much happened."	
_	Code : Optimism (learning experience)	'It taught me something. () It was mainly to learn, and even though I'm losing, I'm glad I did it.'	

5. Results Analysis

• Initial successes drive positive emotions: when there were gains, even small ones (micro-gains'), it generated pride and satisfaction (Ansel, 2010). One participant expressed this satisfaction at having made good decisions: 'Happy and proud of myself. To say to yourself: "This is what I've read, this is what I've seen, this is how I interpret it and this is the decision I've made." If you make a good decision, you've made a good personal interpretation, so you're happy.' Another participant even mentioned feeling 'very proud, very happy. In the sense that I knew how to do the

right thing in relation to others.' Another said they felt '*positive at the very beginning, I was up 500-something.*' However, these positive moments were often short-lived due to the anticipation of losing these gains (Gear et al., 2017).

Significant losses drive negative emotions: losses were a major source of negative emotions, becoming the 'worst' for some (Sokol-Hessner et al., 2013; Finet et al., 2025). Frustration was omnipresent, often related to the inability to get back on track or feelings of powerlessness on the face of the market. One participant described the disgust he felt experiencing significant and potentially avoidable losses: 'And on Wednesday, it was even more than disgust,' feeling 'disgusted.' Loss figures were sometimes mentioned, such as a loss of "minus 800, and in total, I was down 700" or being "at a loss of 1,000" and last in the rankings. Sadness and anger were also direct consequences of bad results. To illustrate this point, Table X shows the evolution of transactions over the three days of the experiment. Even though the financial portfolio was only virtual and the losses on the index were limited, participants seemed very affected by the capital losses incurred (there was a strong sense of appropriation and personal ownership of the portfolio and its value). Going further, we also note that on the third day, a feeling of abandonment seemed to have developed among some participants (3, 6 and 7), who made virtually no trade at all. This finding is particularly surprising given that a reward has been promised to the holder of the highest-value portfolio. We therefore expected more aggressive strategies at the end of the experiment, as some participants had nothing left to lose. We think that disappointments might have led to some people giving up, because they didn't have enough energy left to deal with their emotions (Domeignoz & Morin, 2016).

	Total	B ²	S ³	Total	В	S	Total	В	S	Total	В	S
	D ¹ 1			D 2			D 3					
1	21	12	9	18	15	3	8	5	3	47	32	15
2	28	17	11	8	4	4	7	3	4	43	24	19
3	17	15	2	4	1	3	2	1	1	23	17	6
4	49	28	21	14	10	4	12	9	3	75	47	28
5	18	12	6	21	10	11	16	7	9	55	29	26
6	15	11	4	2	1	1	0	0	0	17	12	5
7	13	9	4	12	7	3	1	0	1	26	16	10
8	11	10	1	9	3	6	16	8	8	36	21	15
Total	172	114	58	88	51	35	62	33	29	322	198	124
Mean	21,5	14,25	7,25	11	6,37	4,38	7,75	4,12	3,62	40,25	24,75	15,5

Table 11. General Trading Orientation Over the Three Days of the Experiment

• <u>The failure to move up in the rankings generated anger and frustration</u>: The inability to turn the negative trend around and regain lost after significant declines was a

¹ Day

² Buy

³ Sell

major source of frustration. Efforts to buy back after selling at a loss were met with stocks that did not rise (Lo & Repin, 2002). One participant expressed this cycle of failure to recover: '*After I sold all my shares, I thought, "OK, I'll buy this, it'll go up, it'll go up." But it didn't*.' This situation could lead to desperation and resignation (Gross, 2014) in facing too large a gap in the rankings to close, making the situation '*hopeless*'.

- <u>Pressure from rankings and deadlines</u>: Knowing the results of others through realtime rankings and the deadline for the experiment added significant pressure (Ariely & Zakay, 2001; Andraszewicz et al., 2023). Results (good or bad) were amplified by comparison to others and the time remaining. The fear of falling or not being able to move up in the rankings turned what was simply a loss into fear. As one participant noted: 'Yes, it's true that with the rankings being displayed every hour... you feel stressed knowing that you're being ranked against others, that's normal.'
- <u>The learning experience</u>: Beyond the negative financial results, a major positive achievement for many participants was the learning experience itself. Even when they lost money, they remained satisfied with their participation and the knowledge they acquired (Nicolosi et al., 2009). This optimism about learning gave them a sense of value for the experience despite their financial losses. One participant said, "*I'm very proud. It gave me skills. It's just that I wasn't lucky with the stock market.*" Another said, '*It gave me something. (...) It was mainly to learn, and even though I lost money, I'm glad I did it.*" Learning patience and how to manage emotions were also valuable 'results" of the experience (Grecucci & Sanfey, 2014).

6. Conclusion

Our trading simulation experience induced a strong emotional response in participants, which evolved over the three days. This was largely shaped by interactions with the market, gains and losses, time pressure and ranking, as well as by each participant's expectations and their initial level of experience.

At the beginning of the experiment (on Monday), the main emotional state was positive anticipation and optimism. This anticipation was connected to an interest in the world of trading and the chance to get some experience or improve skills. Some people might have felt a bit nervous or scared of not being good enough or making mistakes.

In the middle of the experiment (on Tuesday), the emotional situation became more complex and intense. Moments of happiness followed gains, which validated decisions made and personal analysis. However, this phase was mainly dominated by the emergence and intensification of negative emotions. Anger (manifesting as frustration) became very present, often linked to losses, poor purchase timing, failed strategies, or feelings of powerlessness in relation to market movements and the inability to reverse the bearish trend. Sadness also appeared, often connected to losses or disappointment at not making the best choices. Fear intensified considerably, mainly due to the pressure of the rankings and the deadline for the experiment, creating a fear of losing position or not being able to recover. Stronger emotions such as disgust arose in relation to significant losses.

At the end of the experiment (on Wednesday), sadness and anger prevailed, but for many participants, these feelings gradually turned into resignation. Faced with a stagnant market and losses that were considered irrecoverable, a kind of powerlessness and abandonment began to dominate. Anger towards themselves or the situation was gradually replaced by a kind of "fatalism".

Despite difficult financial times during the experiment, optimism was noted, but it moved from hoping to make money to valuing the learning experience. At the end, participants were proud of taking part, learning, or getting new skills like patience or managing their emotions.

In short, the study reveals a commonly experienced emotional transition: from an initial phase of positive anticipation and optimism related to learning, to an intermediate phase dominated by growing sadness, stress and fear brought by losses and external pressures, ending, at the end of the experience, a combination of resignation in relation to financial losses and optimism specifically focused on the lessons learned from the experience.

7. Further Research Avenues

- Exploring the emotional trajectories : our results highlight a pattern of emotional progression, moving from initial anticipation and optimism towards heightened frustration, sadness and fear in the middle of the experience, often ending in resignation and discouragement, but also with persistent optimism about learning and pride in the experience. A quantitative study on a larger sample would be needed to statistically validate these trajectories. More refined time-series methods (e.g., daily or intra-daily surveys) would also be useful to track emotional fluctuations in real time.
- Identify and quantify the impact of specific emotional drivers: Participants relate their emotions to specific events such as gains (generating happiness), losses (generating sadness and disgust), market volatility, ranking pressure and deadlines. One avenue for research could be correlation studies between performance measures (e.g. % loss, fall in ranking) or market events and the intensity and type of emotion.
- Investigate the influence of individual differences and previous experience: prior experience and risk propensity can modulate emotional reactions and management strategies (e.g., caution or cutting losses). A feeling of inadequacy among beginners is also an important factor. It would therefore be useful to include personality questionnaires before the simulation and analyze how these traits, together with experience, predict emotional patterns and performance.
- Analyzing the impact of emotions on trading decisions: our results show how emotions such as frustration or fear can influence decisions (e.g. becoming

distracted, making quick decisions under stress, cutting losses, or taking no decision). This would involve designing experiments where participants have to make decisions after being induced into a particular emotional state (e.g., frustration following artificial losses).

- Explore the impact of simulation design features: the impact of ranking and deadlines has been highlighted. Emotional experiences in simulations with and without ranking could be compared with different durations or with different risk management rules.
- Analyze the link between emotions and their evolution over time, the emergence of cognitive and behavioral biases, and the associated connections with the decision-making process: the study focuses only on emotions that may in some cases be a prerequisite for the emergence of biases, which may be the real drivers for understanding the decision-making process.

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10. References

Abbink, K., & Rockenbach, B. (2006). Option pricing by students and professional traders: a behavioural investigation. *Managerial and Decision Economics*, *27*(6), 497-510. https://doi.org/10.1002/mde.1284

Ackert, L. F., Church, B. K., Tompkins, J., & Zhang, P. (2005). What's in a name? An experimental examination of investment behavior. *Review of Finance*, 9(2), 281–304. https://doi.org/10.1007/s10679-005-7594-2

Ahn, Y., & Kim, D. (2023). Visceral emotions and Bitcoin trading. *Finance Research Letters*, 51. https://doi.org/10.1016/j.frl.2022.103458

Allain, P. (2013). La prise de décision: aspects théoriques, neuro-anatomie et évaluation. *Revue de neuropsychologie*, 5(2), 69-81. <u>https://doi.org/10.1684/nrp.2013.0257</u>

Andraszewicz, S., Kaszás, D., Zeisberger, S., & Hölscher, C. (2023). The influence of upward social comparison on retail trading behaviour. *Scientific Reports*, *13*(1), 22713. https://doi.org/10.1038/s41598-023-49648-3

Ansel, D (2010). Incertitude et intensité émotionnelle en situation de négociation.*Négociations,* 1(13). 23-41.<u>https://doi.org/10.3917/neg.013.0023</u>

Ariely, D., & Zakay, D. (2001). A timely account of the role of duration in decision making. *Acta psychologica*, *108*(2), 187-207. <u>https://doi.org/10.1016/S0001-6918(01)00034-8</u>

Baker, M., & Wurgler, J. (2007). Investor sentiment in the stock market. *Journal of economic perspectives*, *21*(2), 129-151. <u>https://doi.org/10.1257/jep.21.2.129</u>

Barber, B. M., & Odean, T. (2001). Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment. *The Quarterly Journal of Economics*, *116*(1), 261-292. <u>https://doi.org/10.1162/003355301556400</u>

Bashir, T., Rasheed, S., Raftar, S., Fatima, S., & Maqsood, S. (2013). Impact of behavioral biases on investor decision making: Male vs female. *Journal of Business and Management*, *10*(3), 60-68.

Biais, B., Hilton, D., Mazurier, K., & Pouget, S. (2005). Judgmental overconfidence, selfmonitoring, and trading performance in an experimental financial market. *The Review of Economic Studies*, 72(2), 287–312. <u>https://doi.org/10.1111/j.1467-937X.2005.00333.x</u>

Bingham, A. J. (2023). From data management to actionable findings: A five-phase process of qualitative data analysis. *International Journal of Qualitative Methods*, *22*. <u>https://doi.org/10.1177/16094069231183620</u>

Bouattour, M., & Martinez, I. (2019). Efficient market hypothesis: an experimental study with uncertainty and asymmetric information. *Finance Contrôle Stratégie*, (22-4). https://doi.org/10.4000/fcs.3821

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research In Psychology*, 3(2), 77-101. <u>https://doi.org/10.1191/1478088706qp0630a</u>

Bruguier, A. J., Quartz, S. R., & Bossaerts, P. (2010). Exploring the nature of "trader intuition." *The Journal of Finance*, 65(5), 1703–1723. <u>https://doi.org/10.1111/j.1540-6261.2010.01591.x</u>

Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & quantity*, 56(3), 1391-1412. <u>https://doi.org/10.1007/s11135-021-01182-y</u>

Clore, G. L., & Huntsinger, J. R. (2007). How emotions inform judgment and regulate thought. *Trends in cognitive sciences*, *11*(9), 393-399. <u>https://doi.org/10.1016/j.tics.2007.08.005</u>

Conlin, A., Kyröläinen, P., Kaakinen, M., Järvelin, M. R., Perttunen, J., & Svento, R. (2015). Personality traits and stock market participation. *Journal of Empirical Finance*, *33*, 34-50. https://doi.org/10.1016/j.jempfin.2015.06.001

Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.

Cueva, C., & Rustichini, A. (2015). Is financial instability male-driven? Gender and cognitive skills in experimental asset markets. *Journal of Economic Behavior & Organization*, *119*, 330-344. <u>https://doi.org/10.1016/j.jebo.2015.08.014</u>

Della Vedova, J., Grant, A., & Westerholm, P. J. (2023). Investor behavior at the 52-week high. *Journal of Financial and Quantitative Analysis*, *58*(7), 2852-2889. https://doi.org/10.1017/S002210902200148X

Deurkar, P., Kumar, N., & Kumar, A. (2021). Does happiness affect decision making in goal setting, risk taking, and profitability situations. *The International Journal of Indian Psychology*, 9(1), 233-242. <u>https://doi.org/10.25215/0901.027</u>

Dhingra, B., Batra, S., Aggarwal, V., Yadav, M., & Kumar, P. (2024). Stock market volatility: a systematic review. *Journal of Modelling in Management*, *19*(3), 925-952. https://doi.org/10.1108/JM2-04-2023-0080

Domeignoz, C., & Morin, E. (2016). Les émotions ont leur raison, qu'il convient d'écouter. *Entreprendre & innover*, (2), 7-15. <u>https://doi.org/10.3917/entin.029.0007</u>

Duxbury, D., Gärling, T., Gamble, A., & Klass, V. (2020). How emotions influence behavior in financial markets: a conceptual analysis and emotion-based account of buy-sell preferences. *The European Journal of Finance*, *26*(14), 1417-1438. https://doi.org/10.1080/1351847X.2020.1742758

Etchart-Vincent, N. (2006). Expériences de laboratoire en économie et incitations monétaires. *Revue d'économie politique*, *116*(3), 383-418. <u>https://doi.org/10.3917/redp.163.0383</u>

Finet, A., Kristoforidis, K., & Viseur, R. (2021). L'émergence de biais comportementaux en situation de trading: une étude exploratoire. *Recherches en Sciences de Gestion*, *14*6(5), 147-182. <u>https://doi.org/10.3917/resg.146.0147</u>

Finet, A., Viseur, R., & Kristoforidis, K. (2022). Les instruments de prises de décisions en situation de trading: une étude exploratoire. *Revue du Financier*, *44*(248).

Finet, A., & Laznicka, J. (2025). Addressing Emotional Dysregulation in Experimental Design. *Psychology and Behavioral Sciences*, *14*(1), 7-18. <u>https://doi.org/10.11648/j.pbs.20251401.12</u>

Finet A., Laznicka J. (2025). The Decline and Fall of the Homo Economicus: the Urgent Need of Understanding Emotions in Financial Decision-Making. *International Journal of Social Sciences and Humanities Review*, 13(1), 145-155. <u>https://doi.org/10.5281/zenodo.14842758</u>

Finet, A., Laznicka, J., & Palumbo , H. (2025). Qualitative analysis of the influence of biases and emotions on decision-making in stock markets: the case of individual investors. *International Journal of Research in Business and Social Science (2147-4478)*, *14*(3), 151–163. https://doi.org/10.20525/ijrbs.v14i3.3992

Finet, A., Kristoforidis, K., & Laznicka, J. (2025). Emotional Drivers of Financial Decision-Making: Unveiling the Link Between Emotions and Stock Market Behavior (Part 3). *Journal of Next-Generation Research 5.0, 1*(3). <u>https://doi.org/10.70792/jngr5.0.v1i3.116</u>

Finet, A., Kristoforidis, K., & Laznicka, J. (2025). Emotional Drivers of Financial Decision-Making: Unveiling the Link between Emotions and Stock Market Behavior (Part 2). *Journal of Next-Generation Research 5.0, 1*(3). <u>https://doi.org/10.70792/jngr5.0.v1i3.114</u>

Firestone, W. A. (1993). Alternative arguments for generalizing from qualitative research. *Educational Researcher*, *22*(4), 16-23. <u>https://doi.org/10.3102/0013189X022004016</u>

Fréchette, G. R. (2011). Laboratory experiments: Professionals versus students. *Available at SSRN 1939219*.

Gabbi, G., & Zanotti, G. (2011). *Emotional state financial expectations and overconfidence*. Siena Working Paper in Finance. Retrieved from <u>http://efmaefm</u>. org/0EFMSYMPOSIUM/Renmin-2011/papers/Gabbi. pdf. Gabbi, G., & Zanotti, G. (2019). Sex & the City. Are financial decisions driven by emotions?. *Journal of Behavioral and Experimental finance*, *21*, 50-57. https://doi.org/10.1016/j.jbef.2018.10.005

Gambetti, E., & Giusberti, F. (2012). The effect of anger and anxiety traits on investment decisions. *Journal of Economic Psychology*, *33*(6), 1059-1069. https://doi.org/10.1016/j.joep.2012.07.001

Gear, T., Shi, H., Davies, B. J., & Fets, N. A. (2017). The impact of mood on decision-making process. *EuroMed Journal of Business*, *12*(3), 242-257. <u>https://doi.org/10.1108/EMJB-04-2016-0013</u>

Goodell, J. W., Kumar, S., Rao, P., & Verma, S. (2023). Emotions and stock market anomalies: A systematic review. *Journal of Behavioral and Experimental Finance*, *37*, 100722. https://doi.org/10.1016/j.jbef.2022.100722

Gorgievski, M., & van Delden, M. (2008, July). Mood And Decision-Making: A Diary Study Among Entrepreneurs. In XXIX International Congress of Psychology. <u>http://hdl.handle.net/1765/104901</u>

Grecucci, A., & Sanfey, A. G. (2014). Emotion regulation and decision making. *Handbook of emotion regulation*, *2*.

Gross, J. J. (2014). Emotion regulation: Conceptual and empirical foundations. *Handbook of emotion regulation*, *2*, 3-20.

Habib, M., Cassotti, M., Moutier, S., Houdé, O., & Borst, G. (2015). Fear and anger have opposite effects on risk seeking in the gain frame. *Frontiers in psychology*, 6, 253. https://doi.org/10.3389/fpsyg.2015.00253

Hanke, M., Huber, J., Kirchler, M., & Sutter, M. (2010). The economic consequences of a Tobin tax—an experimental analysis. *Journal of Economic Behavior & Organization*, 74(1-2), 58-71. https://doi.org/10.1016/j.jebo.2010.02.004

Harmon-Jones, C., Bastian, B., & Harmon-Jones, E. (2016). The discrete emotions questionnaire: A new tool for measuring state self-reported emotions. *PloS One*, *11*(8). https://doi.org/10.1371/journal.pone.0159915

Hoffmann, A. O., Post, T., & Pennings, J. M. (2015). How investor perceptions drive actual trading and risk-taking behavior. *Journal of Behavioral Finance*, *16*(1), 94-103. https://doi.org/10.1080/15427560.2015.1000332

Isen, A. M. (2000). Some perspectives on positive affect and self-regulation. *Psychological inquiry*, *11*(3), 184-187. <u>https://www.jstor.org/stable/1449800</u>

Kessler, J. B., McClellan, A., Nesbit, J., & Schotter, A. (2022). Short-term fluctuations in incidental happiness and economic decision-making: experimental evidence from a sports bar. *Experimental Economics*, 1-29. <u>https://doi.org/10.1007/s10683-021-09708-9</u>

Kirchler, M. (2009). Underreaction to fundamental information and asymmetry in mispricing between bullish and bearish markets. An experimental study. *Journal of Economic Dynamics and Control*, 33(2), 491-506. <u>https://doi.org/10.1016/j.jedc.2008.08.002</u>

Lerner, J. S., & Keltner, D. (2000). Beyond valence: Toward a model of emotion-specific influences on judgement and choice. *Cognition & Emotion*, *14*(4), 473-493. https://doi.org/10.1080/026999300402763

Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of personality and social psychology*, *81*(1), 146. <u>https://psycnet.apa.org/doi/10.1037/0022-3514.81.1.146</u>

Lerner, J. S., & Tiedens, L. Z. (2006). Portrait of the angry decision maker: How appraisal tendencies shape anger's influence on cognition. *Journal of behavioral decision making*, 19(2), 115-137. <u>https://doi.org/10.1002/bdm.515</u>

Lerner, J. S., Li, Y., & Weber, E. U. (2013). The financial costs of sadness. *Psychological science*, 24(1), 72-79. <u>https://doi.org/10.1177/0956797612450302</u>

Lo, A. W., & Repin, D. V. (2002). The psychophysiology of real-time financial risk processing. *Journal of cognitive neuroscience*, *14*(3), 323-339. <u>https://doi.org/10.1162/089892902317361877</u>

Maxwell, J. A. (1992). Understanding and validity in qualitative research. *Harvard Educational Review*, 62(3), 279-300. <u>https://doi.org/10.17763/haer.62.3.8323320856251826</u>

Meghana J., & Rinju G. (2019). Happiness and decision making: An experimental study. *Humanities and Social Science Studies*, 8(1), 37-49.

Nicolosi, G., Peng, L., & Zhu, N. (2009). Do individual investors learn from their trading experience?. *Journal of Financial Markets*, *12*(2), 317-336. https://doi.org/10.1016/j.finmar.2008.07.001

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, *16*(1), 1-13. https://doi.org/10.1177/1609406917733847

Oehler, A., Wendt, S., Wedlich, F., & Horn, M. (2018). Investors' personality influences investment decisions: Experimental evidence on extraversion and neuroticism. *Journal of Behavioral Finance*, *19*(1), 30-48. <u>https://doi.org/10.1080/15427560.2017.1366495</u>

Özden, M. (2024). Content and thematic analysis techniques in qualitative research: Purpose, process and features. *Qualitative Inquiry in Education: Theory & Practice*, 2(1), 64-81. https://doi.org/10.59455/qietp.20

Porter, D. P., & Smith, V. L. (2003). Stock market bubbles in the laboratory. *The Journal of Behavioral Finance*, 4(1), 7-20. <u>https://doi.org/10.1207/S15427579JPFM0401_03</u>

Rossignol, M., Anselme, C., Vermeulen, N., Philippot, P., & Campanella, S. (2007). Categorical perception of anger and disgust facial expression is affected by non-clinical social anxiety: An ERP study. *Brain Research*, 1132, 166–176. <u>https://doi.org/10.1016/j.brainres.2006.11.036</u>

Schulreich, S., Gerhardt, H., & Heekeren, H. R. (2016). Incidental fear cues increase monetary loss aversion. *Emotion*, *16*(3), 402. <u>https://psycnet.apa.org/doi/10.1037/emo0000124</u>

Schunk, D., & Betsch, C. (2006). Explaining heterogeneity in utility functions by individual differences in decision modes. *Journal of Economic Psychology*, *27*(3), 386-401. https://doi.org/10.1016/j.joep.2005.08.003 She, S., Eimontaite, I., Zhang, D., & Sun, Y. (2017). Fear, anger, and risk preference reversals: An experimental study on a Chinese sample. *Frontiers in Psychology*, 8, 1371. https://doi.org/10.3389/fpsyg.2017.01371

So, J., Achar, C., Han, D., Agrawal, N., Duhachek, A., & Maheswaran, D. (2015). The psychology of appraisal: Specific emotions and decision-making. *Journal of Consumer Psychology*, *25*(3), 359-371. <u>https://doi.org/10.1016/j.jcps.2015.04.003</u>

Sokol-Hessner, P., Camerer, C. F., & Phelps, E. A. (2013). Emotion regulation reduces loss aversion and decreases amygdala responses to losses. *Social cognitive and affective neuroscience*, 8(3), 341-350. <u>https://doi.org/10.1093/scan/nss002</u>

Sokolowska, J., & Makowiec, P. (2017). Risk preferences of individual investors: The role of dispositional tendencies and market trends. *Journal of Behavioral and Experimental Economics*, 71, 67-78. <u>https://doi.org/10.1016/j.socec.2017.09.003</u>

Taffler, R. (2014). Emotional finance: theory and application. Preuzeto, 12, 2023.

Tian, Y. (2024). Behavioral Finance: Loss Aversion, Market Anomalies, and Prospect Theory in Financial Decision-Making. *Highlights in Business, Economics and Management, 28*, 276-280. https://doi.org/10.54097/h1wnk736

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, *15*(3), 398-404. <u>https://doi.org/10.1111/nhs.12048</u>

Vamossy, D. F. (2021). Investor emotions and earnings announcements. *Journal of Behavioral and Experimental Finance*, 30. <u>https://doi.org/10.1016/j.jbef.2021.100474</u>

Whiting, L. S. (2008). Semi-structured interviews: Guidance for novice researchers. *Nursing & Health Sciences*, *10*(1), 42-49.

Widyarini, I. (2017). The role of negative moral emotions (anger and disgust) in ethical decisionmaking. 8th International Conference of Asian Association of Indigenous and Cultural Psychology (ICAAIP 2017), 244–250. Atlantis Press. <u>https://doi.org/10.2991/icaaip-17.2018.57</u>

Xia, Y., & Madni, G. R. (2024). Unleashing the behavioral factors affecting the decision making of Chinese investors in stock markets. *Plos One*, *19*(2). https://doi.org/10.1371/journal.pone.0298797

Xu, R., Liu, Y., Hu, N., & Guo, J. M. (2022). What drives individual investors in the bear market?. *The British Accounting Review*, 54(6). <u>https://doi.org/10.1016/j.bar.2022.101113</u>