



# Journal of Innovative Research (JIR)

ISSN: 2837-6706 (ONLINE)

**VOLUME 4 ISSUE 1 (2026)**

**PUBLISHED BY  
E-PALLI PUBLISHERS, DELAWARE, USA**



## The Investment Uncanny Valley: Narrative Realism, Cognitive Dissonance, and Behavioral Biases in Cryptocurrency Markets

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### Article Information

**Received:** August 12, 2025

**Accepted:** September 15, 2025

**Published:** January 08, 2026

### Keywords

*Behavioral Finance, Cognitive Dissonance, Cryptocurrency, Investment Uncanny Valley, Irrational Investment Behavior, Narrative Construction, Psychological Bias*

### ABSTRACT

This study investigates the phenomenon of the “Investment Uncanny Valley” by integrating Uncanny Valley Theory, Cognitive Dissonance Theory, Behavioral Finance, and Prospect Theory into a multidisciplinary framework for analyzing cryptocurrency investors’ psychological trajectories. Through a systematic literature review and the construction of a multi-phase model, the research demonstrates how hyperrealistic narrative construction and technological packaging can generate investor expectations that, when violated by discrepancies in intrinsic value, trust, or market performance, induce intense psychological distress. Key drivers include cognitive dissonance, loss aversion, overconfidence, anchoring bias, and herding behavior, all exacerbated by information asymmetry and social influence. A five-stage formation model of the Investment Uncanny Valley is proposed, explaining the dynamic escalation from narrative immersion to emotional breakdown. The findings offer practical recommendations for individual investors, financial educators, industry actors, and regulators. This study argues that the narrative-driven and decentralized characteristics of cryptocurrency markets constitute fertile ground for hyperreal expectations and investment trauma, underscoring the need for enhanced financial literacy and supervisory interventions in emerging asset environments.

### INTRODUCTION

This study aims to elucidate the psychological challenges faced by investors in the cryptocurrency market, with a particular focus on the structural analogy between such investor behavior and the Uncanny Valley Theory. Since the emergence of Bitcoin in 2008, crypto assets have rapidly proliferated due to their decentralized architecture, anonymity, high volatility, and potential for substantial returns, thereby attracting a wide spectrum of investors (Almeida & Gonçalves, 2023). However, this rapid expansion has also exposed critical vulnerabilities, including information asymmetry, regulatory vacuums, and fraud risks, which collectively generate substantial psychological and cognitive stress for investors (Hafishina *et al.*, 2023). These pressures often impair rational decision-making, particularly in contexts where information asymmetry leads to biased or misguided investment choices.

Behavioral finance has long challenged the assumptions of traditional rational investment models, especially in markets characterized by irrational dynamics. Empirical evidence has shown that investment behaviors are frequently driven by phenomena such as the fear of missing out (FOMO), overconfidence, and herd behavior (Sadi *et al.*, 2011; Berthet, 2022; Kyriazis, 2020), which may escalate into speculative decision-making patterns resembling gambling (Andrade & Newall, 2023). Such tendencies often overlook the inherent risk associated with pursuing high returns. To conceptualize this psychological rupture, the current research introduces the notion of the “Investment Uncanny Valley,” hypothesizing that when crypto assets simulate the appearance of high-quality

traditional assets through narrative construction, technical jargon, and community-driven promotion, investors may experience a psychological breakdown triggered by expectation discrepancies, contradictory information, or trust erosion. This results in negative affective states and impaired decision-making capacity (Wang *et al.*, 2015).

The research is guided by five key inquiries: (1) Can the Uncanny Valley Theory effectively explain the psychological dilemmas experienced by cryptocurrency investors? (2) What mechanisms of cognitive dissonance, expectation violation, and behavioral biases contribute to the formation of the Investment Uncanny Valley? (3) How do crypto narrative strategies, gamification tendencies, and structural trust deficits intensify these dynamics? (4) What are the implications of this psychological mechanism for individual decision-making and broader market stability? (5) What countermeasures can be proposed from the perspectives of investor education, risk control, and regulatory policy?

The primary research objective is to synthesize the Uncanny Valley Theory, cognitive dissonance theory, and behavioral finance into an integrative theoretical framework. By examining empirical cases, the study investigates the triggering conditions and psychological outcomes of investor behavior in crypto markets, and delineates the interaction between internal cognitive factors and external systemic stimuli. Methodologically, this research adopts a qualitative approach, emphasizing the psychological and behavioral dimensions of individual investors. A comprehensive literature review underpins the analysis, with a focus on theoretical integration rather than quantitative forecasting or cross-cultural comparison.

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The study acknowledges limitations including the absence of empirical validation, the novelty of the proposed concept, the fluidity of the cryptocurrency landscape, and the uncertain transferability of its theoretical framework across cultural contexts.

Furthermore, the study predominantly focuses on risks and negative emotional responses, with relatively limited attention to positive psychological factors. Nonetheless, by introducing the Uncanny Valley Theory into the field of financial behavior for the first time, the study extends the application of behavioral finance to emerging markets and enhances theoretical understanding of investor psychology through a multi-theoretical integration. From a practical standpoint, the proposed model contributes to improving risk perception and cognitive awareness among investors; offers educational practitioners a conceptual tool for developing targeted instructional content; informs industry players on responsible product design and marketing practices; and provides regulatory authorities with a psychological basis for establishing warning mechanisms and protective measures to safeguard market integrity and participant welfare.

In summary, this research contributes to bridging the academic gap between cryptocurrency market psychology and interdisciplinary theoretical applications, while offering systematic guidance for risk management and policy formulation in practical domains. The overall structure of the paper includes theoretical foundation, investor psychological modeling, mechanism analysis of the Investment Uncanny Valley, integrative discussion, practical recommendations, and concluding insights, thereby constructing a framework with both theoretical rigor and applied relevance.

## LITERATURE REVIEW

This study conceptualizes the “Investment Uncanny Valley” as a psychological phenomenon whose theoretical foundation integrates three strands of academic inquiry: the uncanny valley theory as a metaphorical model, cognitive dissonance theory as a source of psychological tension, and behavioral finance as an explanatory framework for systematic biases that amplify irrational investment behavior. Originally proposed by Mori (1970), the uncanny valley theory describes the negative emotional response primarily revulsion and discomfort, provoked when humanoid robots approach but fail to fully replicate human likeness. The core mechanism lies in the affective dissonance triggered by high perceptual similarity coupled with key deviations from human attributes (Wang *et al.*, 2015).

The theoretical design of this research bridges narrative economics and the psychological mechanisms underpinning the uncanny valley effect, although these frameworks focus on different levels of analysis. Narrative economics emphasizes how stories and collective myths influence investor sentiment and shape perceptions of risk within financial markets. In contrast, the uncanny valley theory, rooted in robotics and cognitive

psychology, posits a nonlinear affective response curve in which increased realism initially boosts affinity, but ultimately elicits repulsion when a stimulus becomes “too close” yet remains imperfect. In the context of cryptocurrency, the concept of verisimilitude refers to the perceived similarity between digital assets and traditional financial instruments. When cryptocurrencies acquire certain attributes associated with fiat currencies such as transactional utility or value storage yet retain structural opacity, technological immaturity, or regulatory ambiguity, they evoke psychological discomfort akin to the uncanny valley. This study distinguishes the macro-level explanatory power of narrative economics from the micro-level affective mechanics of the uncanny valley, thus preventing conceptual conflation and ensuring analytical clarity.

Recent studies suggest that uncanny reactions may stem from death-related associations, categorical ambiguity, threat perception, and evolutionary psychological mechanisms related to mate selection (Sasaki *et al.*, 2024). Applied to digital asset markets, this perspective implies that when crypto projects present themselves with visual, technical, or narrative resemblances to established financial assets but fail to deliver comparable internal value, feasibility, credibility, or governance, they elicit disillusionment, anxiety, and psychological withdrawal from investors.

Festinger’s (1957) theory of cognitive dissonance offers another explanatory lens. It posits that individuals experience psychological discomfort when their beliefs and behaviors are misaligned, and attempt to reduce dissonance through belief adjustment, behavioral change, or selective information processing. Cryptocurrency investors who initially perceive a project as revolutionary but later incur severe losses face an internal conflict that prompts denial of negative information, overcommitment of funds, or shifting evaluative standards (Akerlof & Dickens, 1982). These self-defensive reactions following narrative collapse constitute a core cognitive adaptation mechanism within the Investment Uncanny Valley.

Behavioral finance identifies a range of biases that are particularly salient in cryptocurrency markets. Heuristic shortcuts often substitute for analytical reasoning under information constraints. Anchoring bias leads investors to rely on historical price peaks; representativeness bias equates narrative similarity with actual probability of success (Zhou *et al.*, 2023); availability bias exaggerates the likelihood of windfall gains based on anecdotal media cases (Chalissery *et al.*, 2023); and familiarity bias drives excessive concentration in popular tokens (Singh *et al.*, 2023).

Framing effects and mental accounting further distort risk perception and capital allocation. Narrative strategies may frame losses as “temporary setbacks” to mitigate fear (Berthet, 2022), or label idle funds as “risk capital” to justify speculative behaviors (Huang & Guenther, 2024). Overconfidence and the illusion of control are exacerbated in volatile environments, as investors misattribute early

success to their own skill and overestimate their ability to predict market trends (Almeida & Gonçalves, 2023; Parmitasari *et al.*, 2022). Participation in social networks or crypto communities reinforces the illusion of market mastery through information access or collective timing strategies (El Haj & Moustafa, 2023), which ultimately increase decision-making errors and financial exposure. Prospect theory also reveals that individuals exhibit heightened sensitivity to losses compared to gains, leading to irrational asset retention and escalation of commitment in the loss domain due to the convexity of the value function (Almeida & Gonçalves, 2023). Herding behavior and social influence pervade crypto communities, where information scarcity fosters conformity. FOMO and the influence of key opinion leaders (KOLs) drive irrational collective decisions (Kyriazis, 2020; Hafishina *et al.*, 2023), while information cascades further exacerbate misaligned group behaviors (Ishfaq *et al.*, 2021).

Self-reinforcing cognitive biases intertwined with emotional responses prolong the uncanny effect. Confirmation bias leads to selective exposure to agreeable information (Berthet, 2022), self-attribution bias inflates personal credit for gains while externalizing blame for losses (Parmitasari *et al.*, 2022), regret aversion and sunk cost fallacies delay necessary exit decisions (Dijkstra & Hong, 2019), while endowment effect and status quo bias promote inertia in holding positions (Tomicki & Kuśmierczyk, 2024; Bergers, 2022). Gambler's fallacy and hot-hand fallacy further distort probabilistic reasoning under randomness (Pelster, 2020). These psychological structures form a layered cognitive system that traps investors in the lower trough of the Investment Uncanny Valley, especially within narrative-driven markets.

In summary, the Investment Uncanny Valley is not a singular psychological event but a multidimensional phenomenon resulting from the interaction of verisimilitude-driven narrative dissonance and systematic cognitive distortions. When digital assets project a misleading semblance of traditional value while lacking corresponding fundamentals, investors experience steep emotional collapse following unmet expectations. This drop is intensified by affective and cognitive defense mechanisms, which further entrench irrational behaviors and heighten systemic risk through trust erosion and market instability.

### Exploring the Relevance of the Uncanny Valley Effect in Shaping Cryptocurrency Investment Behavior

The emergence of the investment uncanny valley phenomenon must be situated within the psychological and behavioral dynamics experienced by cryptocurrency investors in markets characterized by high volatility, strong narrative framing, information asymmetry, and substantial technical barriers. Investors' cognitive processing is often superficial and fragmented, heavily reliant on opinion leaders (KOLs) and media simplifications, which impairs their capacity to evaluate the fundamental attributes of

investment projects (Hafishina *et al.*, 2023). A blend of technological fetishism and black-box acceptance leads to an uncritical optimism toward blockchain, DeFi, and NFT-related terminology, resulting in inflated asset valuation and the systematic underestimation of risk. Almeida and Gonçalves (2023) highlight the interplay between overconfidence and loss aversion, suggesting that investors underestimate risk while demonstrating low tolerance for losses. Pelster (2020) further affirms that gambler's fallacy and the hot-hand fallacy intensify flawed predictions in stochastic markets. Narrative anchoring and historical price reference points (Berthet, 2022) further diminish objective market judgment.

On the affective front, cryptocurrency investors frequently oscillate between greed and fear. The allure of rapid wealth creation fosters speculative impulses and FOMO-driven behavior, prompting irrational momentum buying during market upswings (Andrade & Newall, 2023). The contagion of group emotions both positive and negative renders emotional regulation difficult under conditions of synchronized sentiment (Kyriazis, 2020; Hafishina *et al.*, 2023). As a result, when narratives collapse or projects fail, investors experience intense emotional disillusionment, encompassing anger, shame, and despair, which lie at the core of the investment uncanny valley effect (Akerlof & Dickens, 1982). Group belonging intensifies emotional attachment, while confirmation bias reinforces the rejection of dissenting opinions. Collective identity thus oscillates into cycles of disappointment and scapegoating, engendering structural emotional fragility (Berthet, 2022).

From a motivational and behavioral perspective, some investors view market participation as an ideological wager on emerging technologies and decentralized futures, rather than as purely rational financial activity. Investment decisions are increasingly shaped by herding behavior, with social proof and collective sentiment displacing private information (Kyriazis, 2020; Almeida & Gonçalves, 2023). This replacement fosters informational cascades, resulting in distorted judgments, escalated commitment bias, and sunk cost fallacies. In efforts to avoid acknowledging error or financial loss, investors often double down, exacerbating their financial exposure (Dijkstra & Hong, 2019) and missing critical exit points. Moreover, the prevalence of high-frequency trading and short-term orientation motivated by an illusion of control further encourages overestimation of one's ability to predict market dynamics (El Haj & Moustafa, 2023), amplifying decision-making risk and potential losses.

Prospect theory indicates an asymmetry in investors' risk preferences across gain and loss domains. While gains typically elicit risk-averse behavior aimed at securing profits, losses drive risk-seeking behaviors in pursuit of recovery (Almeida & Gonçalves, 2023; Huang & Guenther, 2024). Furthermore, a deep-seated distrust of regulatory regimes persists among certain investor groups, who view cryptocurrencies as tools for evading oversight and asserting financial autonomy. This perception generates

a disconnect between expectations of legal recourse and the realities of governance risk, a discrepancy also mirrored in existing regulatory frameworks. Given the ontological ambiguity of cryptocurrencies as neither fully currency nor conventional asset their legal treatment remains unsettled, contributing to systemic tension in traditional financial markets and reshaping transactional norms.

In summary, cryptocurrency investors exhibit a complex and overlapping array of cognitive biases, emotional polarizations, motivational drivers, and irrational behaviors. Their excessive expectations during narrative build-up and emotional breakdown upon narrative failure constitute a critical trajectory into the investment uncanny valley. Subsequent sections will further analyze the mechanisms underlying this trajectory, offering insight into how it contributes to systemic psychological risks and decision-making breakdowns in digital asset markets.

### **Panic Responses to Cryptocurrency Investments Across Multiple Cognitive Perspectives**

The phenomenon of the investment uncanny valley is not an isolated investment error but a systemic psychological occurrence. It encompasses the dynamic processes of expectation inflation, belief construction, risk manifestation, and emotional collapse experienced by cryptocurrency investors within a highly narrative-driven, decentralized, and volatile market environment. This process is jointly propelled by cognitive biases and community pressures, with psychological impacts extending beyond financial losses to deeply affect self-concept, self-esteem structures, social trust, and long-term decision-making logic. This section, grounded in the staged evolution model of the “uncanny valley” psychological mechanism, further elucidates the multifaceted psychological shocks constituted by expectation disconfirmation, cognitive dissonance, emotional breakdown, and trust collapse.

The formation of the investment uncanny valley commences with the phase of heightened narrative-driven expectation inflation. During this period, project teams and community opinion leaders extensively employ symbolic language to package technological visions, token mechanisms, and industry futures, simulating the image of “revolutionary growth assets” akin to those in traditional finance. This narrative, amalgamated with endorsements from key opinion leaders (KOLs), community mobilization, technical jargon, and media embellishment, constructs a highly realistic asset projection, leading investors to draw parallels with early success stories such as Amazon, Google, and Ethereum. In this context, investors activate representativeness and availability heuristics, forming optimistic expectations that transcend risk assessments, thereby fostering initial trust in the project. The foundation of this trust is not predicated on financial reports, governance structures, or regulatory transparency but rather on community belonging, discourse alignment, and emotional

connections, representing a form of non-institutional trust.

Subsequently, the process advances to the initial investment and positive reinforcement stage. Influenced by narrative propulsion and group identity, investors enter the market, and if short-term price increases occur, their beliefs are validated, reinforcing investment behaviors. Early profit experiences engender overconfidence biases, leading investors to overestimate their stock-picking abilities and market forecasting skills. At this juncture, confirmation bias becomes highly active, with investors tending to accept information consistent with their investment decisions while ignoring or rationalizing potential risk signals. The psychology of commitment escalation also emerges during this phase, where investors, buoyed by early profits, increase their investments, believing that continued input will yield higher returns. The community, unified by shared profits, develops strong cohesion, forming a psychological structure akin to a “faith community,” further resisting dissenting voices. However, this scenario is built upon a collective psychological belief in the narrative, and if the overall benefits fail to support its foundational arguments, the likelihood of belief collapse correspondingly increases.

A pivotal turning point arises when the project begins to exhibit “non-human” characteristics that deviate from the original narrative. This stage is typically triggered by events such as technical implementation difficulties, lack of application scenarios, governance failures, or price manipulation, revealing a value vacuum behind the narrative packaging. Analyzing from the perspectives of classification difficulty and perceptual mismatch theories, when a stimulus simultaneously possesses two mutually exclusive characteristics (e.g., “quasi-technological asset” and “highly speculative item”), investors struggle to categorize it stably, resulting in intense discomfort and cognitive confusion. At this point, subtle questioning voices may emerge within the community, yet most remain constrained by emotional identification and sunk costs, delaying responses. Nevertheless, such dissent indicates that similar behaviors can indeed lead to unpredictable consequences, especially when more dissenters gradually coalesce to challenge leadership authority, thereby establishing a certain degree of theoretical foundation for the investment uncanny valley.

More critically, the subsequent development may enter a phase of comprehensive cognitive dissonance and emotional collapse, signifying that investors’ behaviors have formally fallen into the uncanny valley effect. The belief systems initially established by investors gradually disintegrate under real-world impacts, leading to a sharp increase in psychological discomfort and contradictions. Emotional manifestations may include anxiety, shame, anger, despair, and tendencies toward retaliation. Typical behaviors encompass denying negative signals indicated by investment strategies, seeking reversal evidence, emotionally driven liquidation, or attempting to recoup losses through higher-risk actions (such as heavily

investing in high-leverage tokens). The sunk cost fallacy further exacerbates behavioral biases, with investors attempting to “prove their initial decisions were not wrong” through additional investments. The failure of KOL predictions and community disintegration further accelerate the collapse of the original trust system, extending the trust crisis to the entire market.

During the “valley bottom” struggle phase, investors begin to exhibit highly differentiated psychological and behavioral trajectories. Some individuals choose to exit the market entirely and lose confidence in crypto assets, developing a long-term risk-averse tendency; others fall into numbness and hopelessness, exhibiting learned helplessness responses. Some investors seek legal remedies or organize collective actions to attempt to recover losses or rebuild a sense of justice. A minority of individuals engage in reflection and adjustment, correcting cognitive biases and reshaping investment strategies. This phase also represents a crucial juncture for psychological recovery and learning transformation.

The psychological shocks induced by the aforementioned staged processes involve multiple deep structural adjustments and feedback mechanisms. Analyzing from the expectation disconfirmation mechanism, the stark contrast between anticipated value returns and actual performance constitutes the source of emotional frustration. This disparity is not merely due to unmet expected returns but arises from the symbolic collapse experience created by the gap between narrative and reality. Furthermore, cognitive dissonance serves as the core driving force of this phenomenon. During the narrative process, investors attempt to form behaviors that reinforce beliefs and self-affirmation structures. When facts fail to support existing beliefs, investors adopt defense mechanisms such as denial, rationalization, and information filtering, thereby delaying or distorting decisions, leading to greater losses.

Additionally, loss aversion and regret emotions collectively constitute the additive mechanism of psychological pressure for investors. For instance, the pain of financial loss, regret over missed opportunities, self-criticism, and feelings of shame interact, resulting in psychological pressure significantly exceeding reactions induced by general market fluctuations. More severely, self-esteem and self-concept may be severely eroded during this process, leading to emotional instability that affects daily life, thereby generating greater psychological pressure in real life. Research indicates that investment judgments are highly correlated with individual rational evaluations, and the outcomes of failures will undermine their recognition of self-ability and social value, leading to long-term self-doubt and emotional withdrawal issues.

Moreover, the collapse of trust in cryptocurrencies is also one of the core controversies of the uncanny valley effect, particularly given the technological and policy planning uncertainties associated with them, which may result in value impairment or greater instability. Once investors’ trust in project teams, KOLs, communities, and

even the entire market collapses, it will lead to widespread distrust and market apathy effects, reducing their subsequent participation and willingness to bear risks. Simultaneously, in community contexts, the emotional superposition effect caused by social comparison and group pressure cannot be ignored. When individuals find their performance lagging behind peers or perceive implicit norms within the community favoring “diamond hands” or “believers,” their cognitive independence and risk perception accuracy will further diminish, leading to deeper herding behaviors. Such herding behaviors are common in financial derivative products, but the most concerning aspect is that, under the premise of incomplete information and legal frameworks in existing cryptocurrencies, similar situations will become increasingly frequent.

The most severe scenario is that if the uncanny valley effect cannot be effectively resolved, it may lead to psychological trauma or varying degrees of psychological disorders over the long term, manifesting in future behavioral patterns with bipolar variations. One pattern involves extreme conservatism, thoroughly avoiding participation in emerging markets; the other shifts towards more aggressive, short-term trading strategies, hoping to quickly reverse the experience of loss. Additionally, some investors exhibit positive psychological adjustment tendencies, demonstrating the potential role of resilience and growth mindset during the uncanny valley process. The former may hinder the achievement of financial goals, while the latter exacerbates the risk exposure cycle, repeatedly falling into the uncanny valley structure, forming path dependence and recurring trauma.

In summary, the investment uncanny valley constitutes a multi-stage psychological evolution system composed of narrative orientation, trust construction, bias reinforcement, dissonance eruption, and trust collapse, exerting profound and extensive impacts on participants in crypto assets. This phenomenon not only challenges traditional behavioral finance’s understanding of risk perception and irrational behavior but also illustrates how narrative construction and psychological trust mechanisms in digital asset markets mutually constitute and disintegrate, ultimately influencing capital allocation and institutional stability. Conducting a structural analysis of this phenomenon not only aids in deepening research on investor behavior but also provides necessary psychological foundations and practical responses for market risk education, investor protection, and policy regulation.

## RESULTS AND DISCUSSION

This chapter synthesizes the preceding analysis, highlighting the theoretical contributions, practical implications, and research limitations of the investment uncanny valley framework while outlining future research trajectories. The theoretical construct proposed in this study represents a cross-disciplinary application of the Uncanny Valley Theory, illustrating the psychological

dissonance experienced by investors within highly narrative-driven and hyper-realistic crypto asset environments. This conceptualization not only addresses the gaps within behavioral finance regarding irrational decision-making but also extends narrative economics by empirically capturing the dynamics of collective investor psychology in emerging financial ecosystems.

### **Theoretical Contributions and Interdisciplinary Dialogues**

The innovation of the investment uncanny valley lies in its transposition of the “real-but-not-real” dissonance from robotics and human-machine interaction into the realm of investor psychology. It posits that under high degrees of narrative manipulation, crypto assets may appear convincingly real but lack substantive authenticity, thus triggering acute cognitive dissonance and negative emotional feedback. This conceptual advancement fills a critical void in behavioral finance literature by addressing the psychological trauma caused by the collapse of investment narratives and the fragmentation of investor belief systems.

This study also refines the analytical lens through which irrational participation in the crypto market is examined by integrating cognitive dissonance theory, models of behavioral bias, and expectancy violation theory into a dynamic psychological trajectory. This trajectory spans the inflation of narratives, trust construction, skepticism accumulation, dissonance eruption, and belief disintegration. By adapting the curvilinear model of the uncanny valley to map changes in affective and perceptual realism across investment phases, the study deepens the interpretive range of narrative economics at the micro-psychological level.

On the level of theoretical instrumentation, this model unifies expectancy psychology, perceptual categorization theory, and behavioral biases to provide a coherent framework for understanding the fragmented logic behind the formation and collapse of speculative bubbles. This framework can be extended to analyze other narrative-dense asset classes such as startup equities, NFTs, and biotech stocks. To further enhance the clarity and analytical force of this paper, the structure and argumentative flow have been critically examined and refined.

### **Practical Implications and Risk Education**

The investment uncanny valley presents multi-layered implications for different categories of market participants. For individual investors, heightened awareness of cognitive distortions induced by hyper-realistic narratives such as anchoring, representativeness, and sunk cost fallacies (McAfee *et al.*, 2010) is imperative. Investors are encouraged to cultivate critical thinking, establish clear boundaries for risk tolerance and stop-loss strategies, and engage in comparative analysis across diverse information sources to avoid the epistemic closure often found in insular communities.

For educational institutions and investment advisors,

this framework serves as a valuable pedagogical case in behavioral finance, illustrating how trust, resource allocation, and eventual disillusionment unfold within irrational narratives. Case-based instruction could assist learners in identifying behavioral biases and crafting effective risk management strategies. For project sponsors and platform developers, the study warns that unchecked emotional contagion and narrative manipulation can backfire, leading to trust collapse and reputational damage. Transparent governance, empirical substantiation of technical claims, and rational community engagement should be prioritized to prevent the formation of emotional asset bubbles.

From a regulatory standpoint, this study emphasizes the positive correlation between information disclosure and trust formation. It recommends mandating narrative risk disclosure (Shiller, 2017), implementing authenticity verification mechanisms for narrative claims, and establishing real-time community sentiment monitoring systems to preemptively identify signs of an impending investment uncanny valley effect.

### **Research Limitations and Theoretical Extensions**

This research is primarily conceptual, grounded in theoretical synthesis and secondary literature analysis, and thus remains at an exploratory stage. The transitional triggers between the model's phases, the activation mechanisms of cognitive dissonance, and the ruptures in narrative trust require further empirical validation through experimental designs and community discourse analytics.

Cultural and sampling constraints also limit the generalizability of the findings. The current model draws heavily on Western psychological and financial theories and lacks an integrative treatment of collectivist values, authority identification, and face culture prevalent in East Asian societies (Li *et al.*, 2004). In Confucian-influenced societies, social harmony and face-saving behaviors are highly emphasized. Investors experiencing loss or error may be less likely to publicly acknowledge mistakes or display negative emotions, in contrast to the more individualistic Western context where discussing risk and fear is more accepted. For example, in certain Asian markets, investors tend to ask fewer critical questions during risk disclosure sessions possibly reflecting cultural avoidance of questioning authority or disrupting group cohesion.

Furthermore, East Asian societies' reliance on interpersonal networks intensifies herd behavior, with peer and familial recommendations significantly influencing investment decisions. Within this framework, dominant investment narratives may spread more rapidly due to collective validation. However, this same group trust, once fractured, may amplify the emotional reversal, turning widespread optimism into mass distrust and panic. In contrast, investors in more individualistic cultures may prioritize independent analysis and formal information, resulting in less volatile emotional transitions. This study

highlights the need to explore these cultural differentials in depth to explain why identical crypto narratives may elicit vastly different psychological responses across markets. It also acknowledges its limited discussion of positive psychological resources such as technological optimism, communal resilience, and post-failure growth, which could enrich future inquiry.

### Directions for Future Research

Subsequent studies may consider the following trajectories to develop a more comprehensive and context-sensitive predictive model:

(1) Empirical validation: Controlled experimental designs should be employed to test the interaction between narrative realism and flaw detection on affective and trust-related outcomes. Psychometric instruments could also be developed to track the emotional and behavioral phases of investors undergoing the uncanny valley experience.

(2) Big data and text mining: Sentiment analysis and semantic annotation of platforms such as Reddit, Twitter, and Telegram could facilitate real-time mapping of narrative shifts and emotional inflection points, enabling the construction of early warning indicators for narrative collapse.

(3) Cross-cultural comparison: Investigations could explore whether cultural differences produce distinct “valley reactions,” such as whether East Asian investors tend to suppress emotions due to shame-based cultures, and how cultural values shape narrative acceptance and trust formation.

(4) Neuroscientific and physiological approaches: Neuroeconomic and psychophysiological tools (e.g., EEG, skin conductance response) can be used to measure cognitive and emotional responses when narratives disintegrate, providing biological evidence for dissonance and emotional amplification mechanisms.

(5) Policy and intervention design: The development of emotion-sensitive risk disclosure protocols or investor toolkits to detect narrative inconsistencies and regulate psychological responses could reduce irrational losses among novice participants.

In sum, the investment uncanny valley reveals the systemic construction, inflation, manipulation, and eventual implosion of trust in narrative-driven asset markets. This framework opens interdisciplinary dialogues between behavioral finance and psychology while offering actionable entry points for investor protection and regulatory governance. As financial ecosystems and asset typologies continue to evolve, this line of research will be vital in decoding future transformations in capital logic and investor cognition.

### CONCLUSION

This study introduces the concept of the “investment uncanny valley” to explain irrational behaviors in cryptocurrency markets by integrating theories from robotics, social psychology, and behavioral finance. It

proposes a five-stage psychological model from inflated expectations to trust collapse highlighting how mimetic but underperforming assets trigger cognitive dissonance, emotional volatility, and behavioral divergence. The model captures biases such as loss aversion and confirmation bias, alongside collective emotional reactions like regret and denial. It offers multi-level policy implications for investors, educators, project teams, and regulators. While conceptually innovative, empirical validation is needed, and future research should explore cross-cultural and neuroscientific approaches.

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