

EMOTIONAL RATIONALITY IN THE SOCIAL MEDIA ECOSYSTEM: RE-EXAMINING THE ALLAIS PARADOX

Mousumi Boral

Associate Professor

Satyapriya Roy College of Education,

Department of Geography, West Bengal, India

drmousumiboral21@gmail.com

ORCID iD: 0009-0005-3818-7741

Abstract

The contemporary social media ecosystem has transformed human emotional behaviour, decision-making processes, and perceptions of certainty, validation, and risk. This paper critically examines the concept of emotional rationality through the interpretative lens of the Allais Paradox within digitally mediated social environments. The study argues that behavioural choices on social media are not governed solely by logical reasoning but are deeply influenced by emotions such as fear, excitement, insecurity, belongingness, and the desire for recognition. By integrating perspectives from behavioural economics, psychology, neuroscience, sociology, and digital media studies, the paper explains how algorithm-driven platforms intensify emotionally conditioned decision-making through dopamine-based reward systems, social comparison, validation dependency, fear of missing out (FoMO), and virality culture. The paradox becomes relevant because users frequently display inconsistent behavioural preferences seeking emotional certainty through safe online participation while simultaneously engaging in risky behaviour for visibility and social approval. The study further highlights the role of AI-driven algorithms in amplifying emotional engagement and reshaping digital consciousness. It concludes that emotional rationality within social media ecosystems reflects a technologically conditioned adaptive behaviour rather than mere irrationality. The paper emphasizes the need for ethical digital governance, emotional literacy, and critical digital awareness to protect psychological well-being and reflective human reasoning in contemporary digital society.

Keywords: Emotional Rationality, Social Media Ecosystem, Allais Paradox, Digital Decision-Making

Introduction

The contemporary world is undergoing a profound transformation in which digital technologies increasingly shape not only communication and information exchange but also emotions, relationships, values, and everyday human behaviour. As societies become more interconnected through social networking platforms and algorithm-driven environments,

individuals are continuously exposed and allured to new forms of social influence, emotional stimulation, and behavioural conditioning. Across cultures and generations, digital interactions are redefining how people seek recognition, experience belongingness, interpret uncertainty, modify and negotiate personal and social identities within rapidly evolving technological landscapes.

Amid these global shifts, human behaviour can no longer be understood solely through conventional notions of logic and rational calculations. Choices among bountiful of options are increasingly influenced by emotional experiences, social expectations, and technologically mediated feedback that shape perceptions of security, approval, aspiration, and self-worth. These developments raise important questions regarding the nature of judgement and decision-making in contemporary digital civilization. Against this backdrop, the present study critically re-examines the Allais Paradox through the lens of emotional rationality, arguing that social media ecosystems increasingly transform emotional validation, visibility, and social recognition into powerful forces shaping human choices, behaviour outcomes, and agency in the digital age.

Research Questions

The present theoretical and conceptual study seeks to critically investigate the relationship between emotional rationality, social media ecosystems, and paradoxical patterns of decision-making reflected through the framework of the Allais Paradox. The following research questions guide the study:

1. How does the social media ecosystem influence emotional rationality in contemporary human decision-making?
2. In what ways can the Allais Paradox be reinterpreted within the social media ecosystem through the framework of emotional rationality?
3. What psychological, sociological, philosophical, and technological factors contribute to emotionally rational yet paradoxical behaviour in social media spaces?

Objectives of the Study

1. To critically examine the concept of emotional rationality within the context of the contemporary social media ecosystem.
2. To reinterpret the Allais Paradox in relation to emotionally mediated digital decision-making behaviour.
3. To develop an interdisciplinary theoretical framework for understanding social media-driven emotional behaviour.
4. To analyse the broader societal, educational, psychological, and policy implications of emotionally conditioned digital decision-making.
5. To propose theoretical and practical strategies for developing healthier emotional engagement and responsible digital behaviour within social media ecosystems.

Operational Definition of the Terms

1. Emotional Rationality

Emotional rationality refers to decision-making guided by meaningful emotions rather than irrational impulses. Drawing on Hume (1739), Simon (1955), and Damasio (1994), it explains how feelings of security, fear, validation, and belonging shape choices under uncertainty, particularly within digital and social contexts.

2. Social Media Ecosystem

The social media ecosystem is an interconnected digital environment comprising users, algorithms, AI systems, and varied feedback mechanisms. Through personalisation, virality, and instant validation, platforms shape identity, perception, emotional responses, social interactions, and behavioural patterns within contemporary digitally mediated societies, which have a long-lasting effect on cognitive thinking.

3. Allais Paradox

The Allais Paradox, proposed by Allais (1953), demonstrates inconsistent preferences between certainty and risk, challenging Expected Utility Theory (von Neumann & Morgenstern, 1944). It highlights the Certainty Effect, showing how emotionally perceived security often outweighs objective probability in human decision-making. The paradox becomes particularly relevant within social media ecosystems, where users often prefer the certainty of social endorsement while simultaneously pursuing the uncertain rewards of visibility, influence, and virality. Herein, it provides a valuable framework for understanding how emotional rationality shapes digitally mediated selections beyond the predictions of classical economic models.

4. Decision-Making

Decision-making is the higher-order cognitive and emotional process of selecting among alternatives under conditions of risk, uncertainty, and social influence. Simon (1955) and Kahneman and Tversky (1979) demonstrated that choices are shaped not only by logic but also by emotions, heuristics, preconceptions, and contextual factors.

5. Emotional Feedback Loop

The emotional feedback loop is a recurring cycle whereby digital actions generate emotional responses that reinforce future behaviour. Based on Skinner's Operant Conditioning Theory (1953) and Schultz's reward-processing research (1998), repeated validation and feedback gradually condition engagement patterns and emotional dependence.

Methodology of the Study

The study adopts a qualitative, theoretical, and interdisciplinary approach, using conceptual analysis and critical review of secondary literature from scholarly sources and reports by WHO, UNESCO, and WEF. It interprets emotional rationality in social media ecosystems through the Allais Paradox to explain digitally mediated decision-making and its wider societal implications.

Significance of the Study

The present study is significant for its innovative reinterpretation of the Allais Paradox within the emotionally charged realities of contemporary social media ecosystems. It challenges the conventional view that emotionally influenced choices are merely irrational, proposing instead that they often reflect adaptive responses to algorithmically shaped environments. The study offers a nuanced understanding of how validation, uncertainty, risk, and social recognition influence online modes of behaviour, which extends to digital well-being, ethical AI, emotional literacy, and accountable citizenship, while highlighting the urgent need to preserve human agency, reflective judgement, and meaningful social relationships in an increasingly technology-driven world.

Delimitations of the Study

The study primarily focuses on adolescents and youth, whose decision-making is often shaped by social comparison, validation-seeking, FoMO, and algorithmic influence within social media environments. Through a theoretical and analytical interpretation of the Allais Paradox, it examines emotionally conditioned online choices, recognising their growing significance in understanding behaviour outcomes, identity formation, and judgement within twenty-first-century digital society.

Review of Related Literature

Studies by Twenge (2017), UNESCO, and the World Health Organization show that adolescents are increasingly drawn into digital spaces through validation-seeking, FoMO, attention diversion and destruction, and compulsive use, often at the cost of academic focus, emotional balance, and peer stability. These pressures do not remain confined to the individual; they flow into homes, classrooms, and communities through imitation, comparison, and emotional contagion, creating a wider loop of dependency and distraction. Hume (1739) is relevant here because he placed passion at the centre of judgement, while Simon (1955) showed that most choices are bounded by limited information and cognition, making emotional shortcuts likely. Damasio (1994) strengthened this view by proving that emotional signals guide effective decision-making rather than interrupt it.

The study is further grounded in the Allais Paradox proposed by Allais (1953), which challenged Expected Utility Theory (von Neumann & Morgenstern, 1944) by showing that people often prefer certainty and then shift toward risk when emotional context changes. Kahneman and Tversky (1979) deepened this through Prospect Theory, while Slovic (2000) explained how affect shapes risk perception. Cooley (1902), Mead (1934), Festinger (1954), Goffman (1959), and Bandura (1977) help explain identity formation, social comparison, performance, and imitation in digital spaces. Pavlov (1927), Skinner (1953), and Schutz (1998) clarify how rewards, conditioning, and dopamine-driven anticipation sustain repetitive engagement. Zuboff (2019) adds the policy-critical view that attention, emotion, and behaviour have become monetised resources. Together, these works justify re-examining emotional rationality within social media ecosystems as a socially rooted, psychologically reinforced, and technologically amplified pattern of decision-making.

Research Gap

Existing scholarship offers valuable insights into persisting digital behaviour, emotional perception, societal stimulus, and algorithmic engagement. However, greater and in-depth

conceptual integration is needed to understand how creepily emotional rationality operates within contemporary social media ecosystems. The present study advances the perspective by reinterpreting the Allais Paradox as a framework for minutely explaining emotionally conditioned digital decision-making in technologically mediated societies.

Critical Interpretation

Contemporary aligned digital life has transformed decision-making from a purely cognitive process into a deeply relational and emotionally referenced experience. Individuals no longer interact with information in isolation; rather, they encounter a continuous stream of opinions, reactions, recommendations, and symbolic indicators of approval that subtly shape judgement. In such tough environments, exact choices are often influenced not only by objective outcomes but also by diverse anticipated emotional consequences such as acceptance, recognition, belongingness, or fear of exclusion. This reality-loop invites a reconsideration of traditional assumptions about rational behaviour. The Allais Paradox becomes particularly relevant because it reveals that people frequently assign greater value to perceived certainty than mathematical logic alone would predict. Within digital spaces, this tendency appears in everyday practices: a student may prefer posting familiar academic achievements that reliably receive appreciation rather than sharing an innovative but uncertain idea; similarly, users often engage with widely accepted content because it offers social comfort, while occasionally pursuing highly visible opportunities that promise greater recognition. Such behaviour should not be dismissed as an inconsistency. Rather, it reflects the human tendency to direct uncertainty through emotional meaning, social context, and perceived consequences. Thereby, the digital environment acts not merely as a technological platform but as a psychological and social arena where emotional states are increasingly influencing how reality is to be interpreted, curated, and acted upon.

The analysis further suggests that contemporary platforms operate through subtle frames of attention that shape behavioural priorities without direct coercion. Constant recommendation systems, personalised feeds, engagement indicators, and rapid feedback mechanisms incessantly influence what individuals notice, value, and remember. Recent phenomena such as short-form educational content, productivity trends, online learning communities, wellness trials, and creator-led knowledge sharing illustrate how digital environments can both enrich and redirect human behaviour. While these developments offer unprecedented opportunities for learning and connection, they also encourage constant comparison, accelerated response patterns, and heightened sensitivity to external evaluation. Emotional rewards often arrive in small but repeated forms like acknowledgement, visibility, encouragement, or participation within a community, which gradually influence future picks. Consequently, decisions become linked not only to practical outcomes but also to soaring emotional expectations. This process is especially significant among younger generations whose social interactions, educational engagements, experiences, and identity formation increasingly occur across digital spaces. The challenge, therefore, is not the existence of technology itself but the growing tendency to equate visibility with value and engagement with fulfilment. When emotional reinforcement becomes a dominant guide, individuals may unknowingly prioritise immediate affirmation over deeper reflection.

It is noteworthy as the study indicates that the future of digital society will depend less on technological capability and more on the wisdom with which technology is embedded within human life. Progress remains essential; innovations in communication, education, healthcare, accessibility, and knowledge dissemination have created opportunities unimaginable in previous generations. Yet sustainable advancement requires preserving qualities that make human communities resilient to empathy, ethical responsibility, reflective thought, cooperation, and concern for collective well-being. The reinterpretation of the Allais Paradox within social media ecosystems demonstrates that human choices are rarely isolated and detached calculations, in fact, shaped by hopes, fears, relationships, aspirations, and social realities. Recognising this complexity allows a more humane comprehension of behaviour in the digital age. Rather than framing emotion and reason as opposing forces, contemporary society must view them as interconnected dimensions of responsible judgement. The ultimate challenge is to cultivate environments where innovation strengthens human progression rather than merely capturing attention. Thereby, digital development should not be measured solely by speed, reach, or engagement, but by its potentiality to support thoughtful citizenship, meaningful relationships, intellectual independence, and a balanced sense of individual and social responsibility. Such a sharp and sensitive vision offers a constructive pathway toward a technologically advanced yet deeply humane future.

Future Directions

Future directions should move social media away from becoming a bouncing surface for performance and comparison, and toward a humane space shaped by media consistency- the repeated, algorithmically reinforced flow of the same images and claims that can quietly normalise distortion, shallow imitation and vicious scrolls. A healthier digital culture must also challenge social media fakeness, the selective display of only 'success' and 'goodness', which emerged with the rise of highly curated online identities in the 2010s and often hides ordinary struggle stories. Drawing on the 15th to 16th century Japanese ethos of *wabi-sabi*, digital life should learn to value imperfection, transience, and human limitation rather than perfection. Human behavioural exhibits, rooted in an evolutionary perspective of belonging and status-seeking, must be guided by self-restraint and awareness of emotional vulnerability. Through sustainable education and community support, a sharp U-turn can be made away from crab bucket and tall poppy tendencies (modern social metaphors of pulling others down, popularised in the 20th century), toward dignity, balanced mental health, and shared well-being. The often-attributed Bertrand Russell warning on war reminds us that winning without wisdom is still a loss.

Conclusion

The study establishes that emotional rationality is now woven into digital choice, where certainty, status, and recognition quietly redirect judgement. Re-examining the Allais Paradox in social media contexts shows that apparent inconsistency often reflects adaptive responses to algorithmic cues rather than weakness of mind. The deeper implication is global: platforms, educators, families, regulators, and communities must foster slower, wiser, and more humane digital cultures. Sustainable change depends on ethical design, reflective literacy, and emotionally aware citizenship so that technological progress serves shared dignity, social trust, and collective well-being.

REFERENCES

1. Allais, M. (1953). Le comportement de l'homme rationnel devant le risque: Critique des postulats et axiomes de l'école américaine. *Econometrica*, 21(4), 503–546. Retrieved from <https://www.jstor.org/stable/1907921>
2. Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall. Retrieved from https://catalog.nlm.nih.gov/discovery/fulldisplay/alma9915626113406676/01NLM_INST:01NLM_INST
3. Cooley, C. H. (1902). *Human nature and the social order*. New York, NY: Charles Scribner's Sons. Retrieved from <https://archive.org/details/humannaturesocia00cool>
4. Damasio, A. R. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York, NY: G. P. Putnam's Sons. Retrieved from <https://www.penguinrandomhouse.com/books/301122/descartes-error-by-antonio-damasio/>
5. Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140. doi:10.1177/001872675400700202
6. Goffman, E. (1959). *The presentation of self in everyday life*. New York, NY: Doubleday. Retrieved from <https://archive.org/details/presentationofse00goff>
7. Hume, D. (1739). *A treatise of human nature*. Retrieved from <https://www.gutenberg.org/ebooks/4705>
8. Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291. doi:10.2307/1914185
9. Kerr, J. (2014). The idea of emotional rationality. *Ethical Theory and Moral Practice*, 17(4), 731–748. doi:10.1007/s10677-013-9469-0
10. Mead, G. H. (1934). *Mind, self, and society*. Chicago, IL: University of Chicago Press. Retrieved from <https://archive.org/details/in.ernet.dli.2015.275359>
11. Pavlov, I. P. (1927). *Conditioned reflexes*. London, England: Oxford University Press. Retrieved from <https://archive.org/details/conditionedrefle00pavl>
12. Schultz, W. (1998). Predictive reward signal of dopamine neurons. *Journal of Neurophysiology*, 80(1), 1–27. doi:10.1152/jn.1998.80.1.1
13. Simon, H. A. (1955). A behavioral model of rational choice. *Quarterly Journal of Economics*, 69(1), 99–118. doi:10.2307/1884852
14. Skinner, B. F. (2014). *Science and human behavior*. New York, NY: Macmillan. Retrieved from <https://www.bfskinner.org/wp-content/uploads/2014/02/ScienceHumanBehavior.pdf>
15. Slovic, P., Finucane, M. L., Peters, E., & MacGregor, D. G. (2002). The affect heuristic. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 397–420). Cambridge, England: Cambridge University Press. Retrieved from <https://bear.warrington.ufl.edu/brenner/mar7588/Papers/slovic-affect-heuristic-2002.pdf>
16. Twenge, J. M. (2017). *iGen: Why today's super-connected kids are growing up less rebellious, more tolerant, less happy—and completely unprepared for adulthood*. New York, NY: Atria Books. Retrieved from <https://www.jeantwenge.com/igen-book/>
17. UNESCO. (2023). *Guidelines for the governance of digital platforms: Safeguarding freedom of expression and access to information*. Paris, France: UNESCO. Retrieved from <https://www.unesco.org/en/internet-trust>
18. von Neumann, J., & Morgenstern, O. (1944). *Theory of games and economic behavior*. Princeton, NJ: Princeton University Press. Retrieved from <https://archive.org/details/in.ernet.dli.2015.215284/page/n5/mode/2up>
19. World Economic Forum. (2024). *Global risks report 2024*. Geneva, Switzerland: World Economic Forum. Retrieved from <https://www.weforum.org/reports/global-risks-report-2024>

20. World Health Organization. (2024). *Adolescent mental health*. Geneva, Switzerland: World Health Organization. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>
21. Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. New York, NY: PublicAffairs. Retrieved from <https://www.hachettebookgroup.com/titles/shoshana-zuboff/the-age-of-surveillance-capitalism/9781610395694/>