

Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. International Journal of Multidisciplinary Research & Reviews, 5(5),498-516.



INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH & REVIEWS

journal homepage: www.ijmrr.online/index.php/home

SOCIAL MEDIA EVOLUTION AND ADOLESCENT THOUGHT PROCESSES: EXAMINING CHANGES IN CRITICAL THINKING, PERCEPTION, AND DECISION-MAKING

Dr. Kapil Vyas

Faculty of Nursing, Govt. College of Nursing, Kota, (Raj.), India.

How to Cite the Article: Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. International Journal of Multidisciplinary Research & Reviews, 5(5),498-516.



<https://doi.org/10.56815/ijmrr.v5i5.2026.498-516>

<i>Keywords</i>	<i>Abstract</i>
Social Media Evolution, Adolescents, Critical Thinking, Perception, Decision-Making, Cognitive Development, Digital Literacy, Social Media Influence, Information Evaluation, Adolescent Behaviour.	The rise of social media has been incredibly fast, evolving from basic social networks to intricate social algorithm-driven systems. It is all about personalisation, endless scrolling, quantifiable social feedback and short form content. Such design modifications happen at a critical stage in teenage brain development: a time when mechanisms that regulate emotion, listening in when it's their turn, and knowing what to do in response to positive reinforcement are under development. The impact of social media on teens' critical thinking, perception, and decision-making abilities is explored in this narrative review. The research delves at the ways in which teenagers' on-going exposure to concise content, data driven by algorithms, online conversations, influential figures, peer interactions, and various perspectives might impact their thinking and understanding of social and academic matters. There are many advantages to social media including access to information, digital literacy, communications, creativity, and exposure to alternative perspectives. However, it also has some negative effects, such as the spread of false information, cognitive bias, social comparison, diminished focus, and hasty decisions. This study adopts a theory-based approach and methodological considerations by analysing the relation between the advent of social media and the maturing brain of



[The work is licensed under a Creative Commons Attribution
Non Commercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)

Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

	adolescents. In particular, the changeable elements of information evaluation, self-questioning, perception formation, and decisions based on Internet social networks are highlighted. Adolescents' ability to critically evaluate online contents, peer pressure, digital literacy, amount of time being spent on the platform and the quality of the content are all highlighted in the study's multifaceted argument for the far-reaching consequences of social media. It is a study that suggests: social media could have a positive impact on the development of teenagers but could also lead to significant difficulties for their cognition and behaviour if teenagers may get educational guidance, increase their media literacy and enhance their critical thinking ability.
--	---

INTRODUCTION

People have used internet and social media- platforms as a part of their life on every continent [1]. Helps many to find information on any topic they'd like. Adolescents are especially susceptible to information overload as 84% of them use social media every day [2]. Skills such as critical thinking and media literacy [3-4] may be useful to clear up all that information. Most teens (aged 15-22) are developmentally at their cognitive peak and do not have a high level of critical thinking and media literacy skills [5].

During adolescence, a person's cognitive abilities go through transformative changes, progressing from concrete to abstract thought, growth in metacognitive skills, and improving critical thinking abilities. Within the framework of developmental psychology, internal maturation and social interaction have long been regarded as the main processes that underlie cognitive growth and provide a traditional understanding of the processes. But new external effects, brought about by the rise of digital technology, drastically change the course of cognitive development. In this digital age, adolescents have unparalleled access to information, different perspectives and interactive experiences which can strengthen and challenge current thought processes.

Psychologically, a variety of processes are related in regard to how the digital world affects teenagers' thinking. First, given the volume of information on the internet, new techniques for processing information are needed, and these are reflected in multitasking, selective attention and quick scanning. These skills can make some things go quicker, but can lead to a superficial understanding of something by other people. Secondly, the focus on being quick and instant gratification might be interfering with teens' abilities to focus their thought and get introspection. As teenage users negotiate social feedback, online identities, and virtual relationships, they face extra cognitive and emotional challenges brought on by the interactive and socially mediated character of digital settings. One of the most notable things about the digital influence is its impact on focus and attention. Studies have shown that prolonged exposure to digital stimuli can make it more difficult for teens to focus on more complex tasks. This experience has been associated by many with "attention switching", the quick switching of attention from one source of information to another. It



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

may benefit specific online types of tasks but it could negatively affect the development of the ability to sustain attention, which is crucial for other cognitive functions, such as critical thinking and problem-solving.

Adolescents' decision-making is also impacted by their digital settings. Active online contacts and comments can be easily available but could make people act hastily and fail to consider things properly. On top of that, teenage decision-making may be impacted by the magnified peer influence that occurs in many social media situations. Digital impact can also be complex and multidimensional, as digital technologies can facilitate overcoming challenges to inform choice by putting various facts and perspectives at finger's reach. Metacognitive abilities are an important prerequisite for successful thinking and learning and the digital world affects both cognition and development of metacognitive abilities. The capacity to keep tabs on, control, and assess one's own thought processes is known as metacognition. Several activities at once, adapting to new situations and dealing with more and more complex information environments are challenges that adolescents tend to struggle with in digital environments. Together with the appropriate elements of education, these demands can trigger metacognitive flexibility and awareness. Teens may make blunders and inefficiencies in their thinking if they don't get the help they need to control their thoughts.

LITERATURE REVIEW

Necessity of critical thinking ability for students

A student's critical thinking ability (CTA) is associated with their academic performance, according to previous research. Watson and Glaser [6] discovered a correlation between CTA and GPA as well as instructor-assigned grades. Between 0.235 to 0.596, Facione [7] found a positive and statistically significant connection between CTA and GPA. Between college and university students' CTA (dispositions) and GPA [8], a weak but persistent association was also discovered. Community college students' performance was somewhat associated to CTA (as abilities or dispositions) according to Fong et al. [9], and this association held true for both overall and specific test scores. There was a stronger correlation between students' CTA and long-term results than with short-term ones. With a focus on Chinese PE, Ma et al. [10] investigated if and how CTA affected students' performance in science classes. Students' CTA was shown to be significantly related to their physical education success when the same control was used. The correlation between students' CTA and their academic performance has been the subject of mixed findings in the research. There was no statistically significant difference between the two groups of high- and low-achieving students in a distance learning class when it came to course grades and CTA, according to Puzziferro [11]. Similarly, Singleton-Williams [12] discovered that in a beginning computer application class, there was no statistically significant relationship between students' CTA and their final grades. When looking at the connection between CTA and nursing students' academic performance, Shirazi and Heidari [13] discovered no association, however Thompson [14] and Foust [15] discovered detrimental consequences.



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

The positive impact of SMU on CTA

At most cases, excessive social media use (UISM) does not place a focus on improper social media use (SMU), but rather tracks how often SMU occurs, how much time users spend on various platforms, and how they personally feel about social media. Many scales have been developed and tested by academics to assess social media user behaviour; nevertheless, the majority of these measures fall into two broad categories. Intense social media usage is the subject of one set of researchers, whereas addictive features are the subject of the other [16]. Results may vary depending on the wording used in these organisations' surveys [17]. There was a clear demarcation between media reliance and utilisation intensity in this research. There has been research on the link between SMU and CTA, and some of those studies found that people's unique social media habits influence their self-construction and, by extension, their thought processes. A person's self-constructions are shaped by their social media activities, which in turn affects how much they rely on cognitive and emotive thinking styles [18]. Facebook and WhatsApp may also aid in the improvement of students' CTA [19-20], and an investigation by Sumanti et al. [19] into the use of a Facebook group pertaining to geography revealed that social media might aid in the development of CTA. Enhancing students' CTA throughout the learning process is another benefit of reciprocal peer tutoring using Facebook [21]. The disparity in the use of digital technology is mirrored in the disparity between CTA development and UISM, which further indicates a lack of expertise. Personal knowledge acquisition is impacted by Internet use, according to the third digital divide, the knowledge gap on the internet. As an example, those who are politically active online are more likely to be well-versed on the issues facing presidential candidates [22]. Researchers Tien and Fu [23] examined the digital gap among 3,083 first-year students from 12 Taiwanese institutions using various statistical approaches, including generalised ordered logit models and multiple regressions. The research found that children who were very proficient in using computers and related software also had higher levels of academic accomplishment. In their study of 125,000 US college students, Kuh and Vesper [24] looked at how students' use of technology affected their desired academic performance. According to their findings, students' capacity to acquire critical thinking skills, including analytical, logical, and comprehensive thinking, conceptualisation, and social skills, was directly correlated with their level of computer literacy.

The negative impact of social media dependency on CTA

These days, most college students suffer from feelings of isolation, and one way that social media helps is by connecting others with similar interests. In addition, SMU may give students human capital that is impossible to get in the actual world due to the importance of personal growth [25]. University students are encouraged to utilise social media more extensively by SMU since they assist them achieve fulfilment via their networks [26]. As a result of its hedonic design, social media platforms tend to attract and retain users, who are thus more likely to become dependent on the site and actively participate in its activities [27]. When it comes to SMD and addiction, this is the usual procedure. Adverse outcomes may occur when social media use becomes excessive and unregulated



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

[28]. College students often struggle with addiction to SMU, which may negatively affect their academic performance. Academic performance is not strongly predicted by social media use for schoolwork, but it is negatively related with non-academic social media multitasking and other non-academic social media use (particularly for gaming) [29-31]. Subscribing to more social media sites is inversely associated to students' grade point averages. Despite the fact that some research has advocated for using social media in the classroom, there is some evidence that doing so can hinder students' ability to concentrate and do well in class [32]. Researchers have also looked into how social media addiction affects CTA. Research has shown that a large number of Chinese university students are passively and unknowingly dependent on Weibo, a major social media platform in China [33]. The relationship between CTA and smartphone addiction is inversely proportional [34]. Using user emotions and feeling of accomplishment as mediating factors, some research has shown an inverse association between social media addiction and CTA [35]. Some social media shortcomings, such information fragmentation and material saturation, are associated with the detrimental effects of social media addiction on college students' academic performance and CTA. Common examples of platforms where information is conveyed in a fragmented way are Weibo and Twitter. User comprehension is negatively affected by this kind of data. Inadvertently taxing our cognitive resources, sharing knowledge makes us work harder. Hence, we have trouble processing new information, which in turn makes it harder for us to learn [36]. Information overload has been worsened by the mobile era's content delivery and service paradigm. Users' attention, reasoning, and concentration abilities would be further diminished as a result of their excessive internet connection. It might seem that people know more on the surface, but in reality, their capacity for in-depth thought and comprehension has diminished [37]. Many people turn to social media as a way to escape the deluge of information. Social media fatigue is the term used to describe this situation [38]. According to a study of Chinese youth groups, social media burnout is greatly reduced when people experience information overload and social overload simultaneously [39]. Overuse of social media causes a variety of negative emotions in users, including exhaustion, aggravation, anger, disappointment, caution, disinterest, reduced needs, and less motivation, all of which contribute to social media burnout [40]. In times of extreme stress, SMU participants often avoid engaging with others on social media. Excessive use of social media leads to burnout among SMU [38]. Researchers in China discovered that a number of factors contribute to young people's social media burnout, including negative comparison, interaction disorder, information overload, social overload, self-efficacy, and impression management [39]. There is a significant amount of social media fatigue and withdrawal among young people as well [41]. A drop in grades may be the result of social media exhaustion. Students' academic burnout was substantially exacerbated by social media burnout brought on by the instant messaging service, MIM, according to Malik et al. [42]. According to Kirschner and Karpinski [43], there is a strong inverse relationship between Facebook use and academic achievement. Compared to non-Facebook users, Facebook users had lower average GPAs and spent less time studying each week. Facebook use does not directly correlate to more time spent online, but it does have the potential to impact study time [43].



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

IMPACTS ON CRITICAL THINKING

The Greek roots of the English word "critical thinking" (CT) are *kriterion* (meaning "rule" or "standard") and *kritikos* (meaning "able to discriminate"). The process of drawing conclusions or passing judgements in accordance with established standards [44].

Competence, expertise, and mind-set make up CT, according to Watson and Glaser [45]. They zeroed up on a number of CT-related subs kills:

1. Drawing conclusions, or inferences, from the provided data, and being able to tell the difference between accurate and wrong conclusions;
2. Being aware of presumptions, which shows that you can tell facts from ideas;
3. Deductive reasoning, or the capacity to determine if a conclusion was appropriately drawn from the provided data;
4. evaluation of evidence, facts, and the significance of findings;
5. Assessing the merit, applicability, and power of arguments in light of a certain issue [45].

It has the potential to inhibit system 1's natural, intuitive reactions, claims Frederick [46]. Numerical and verbal analytical thinking are distinct from one another. When addressing an issue, numerical analytical thinkers apply mathematical processes [47]. When you solve verbal issues without using mathematical procedures or manipulating numbers, you are engaging in verbal analytical thinking [48]. We may train ourselves to think critically, reflect on our own judgements, and rein in our gut feelings [49]. Being able to think in this way may help one become more media literate, which is useful while doing things like utilising social media. As an example, Ali and Qazi [50] discovered that using social networking sites that are appropriate for formal learning for academic reasons is favourably and very substantially correlated with critical thinking. Another study by Cheng et al. [51] came to the conclusion that critical thinking encompasses both the act of thinking critically and the sentiment behind it. When people say they intend to think critically, they're referring to their own patterns of thought and the ways they typically handle different types of thinking in different contexts. According to Nanath et al. [52], one must first intend to think critically before engaging in any effective thought. This is because effective thought cannot occur without critical thinking as its basis. The purpose to think critically was defined by Skoric et al. [53] as both the mind-set of a thinker and the essence of critical thinking [54]. According to Shah et al. [55], critical thinking is characterised by the following: basing judgements on suitable and accurate evidence; drawing thorough conclusions; rejecting authority and superstition; acknowledging causal links; and enhancing cognition via the acquisition of fresh information. Critical thinking is primarily the multi-faceted examination of problems and contemplation of different solutions, not only the mind's questioning and judgement, say Lyu and Luli [56]. This was a creative and emotional process as well as logical process, integrated and constructive, running in an open system, inspired by the good and bad aspects of life.



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

The capacity to analyse discourse, detect prejudice, identify manipulation tactics, and comprehend the social ramifications of sharing information in digital environments are all part of media literacy, which goes beyond just being proficient with technology tools [58]. This is crucial in building ethical awareness, as two topics would benefit from a greater awareness of the impact disinformation can have on individuals and society: How to use social media responsibly [59].

Media literacy is still approached in a disjointed manner in many educational contexts, most especially in Latin America, and without ongoing educational measures, or systematic incorporation into the curricula. [60] Notwithstanding the relevance of these skills, media literacy remains unstirred in many educational contexts, including Latin America, making its approach disjointed and without on-going educational measures or systematic curricular incorporation. However, the difference in the two environments—the digital one that teenagers live in and the educational solutions offered by schools—as well as the lack of institutionalisation, renders them vulnerable to disinformation [61].

Considering this, the existing scientific data needs to be organised in order to develop an understanding of the relationship between social media use, exposure to disinformation, and how schools can play a role in media literacy. Therefore, this article is aimed at conducting a thorough literature review for the period of 2019–2025. The review will focus on how the exposure to misinformation is exacerbated by adolescents' uncritical use of social media and how media literacy [62] can be promoted to reduce this effect of inaccurate information for adolescents at educational institutions.

Education is a cornerstone in the development of digitally literate and critically thinking citizens, and this review seeks to identify theoretical frameworks, pedagogical approaches, and empirical evidence that can inform the design of educational interventions to improve adolescents' information literacy and critical thinking skills [63].

CHANGES IN PERCEPTION

According to recent studies, the relationships that teenagers form with their friends and classmates are either aided or hindered by their social media connections [64]. Furthermore, there is no limit to the number of individuals who may provide them with comments on themselves online, unlike the input they get from close friends and family [65]. Exposure to an online audience may lead to both positive outcomes (such as increased confidence) and negative outcomes (such as increased risk-taking) [66, 65]. Therefore, further research is needed to determine the function of social media audiences in the identification formation of adolescents.

Significant consequences for identity development arise from the interaction between adolescent psychosocial changes—including autonomy, urge to belong, peer acceptability, self-esteem, and self-concept—and a specific digital environment. Users may share their hobbies, views, and opinions about themselves (self-concept) on social media, where they also have the chance to constantly



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

reinvent themselves and use digital technologies to control or manage the image they provide to others [67]. Along with identifying and imitating social referents [68] and expressing one's individuality (i.e., one's identity) to separate one from others [64], adolescents may use social media to achieve both.

Although they may provide a healthy sense of self-worth, social comparison with peers or social referents (such as YouTubers or TikTokers) might put at danger the already susceptible teenagers. So, they may also help you develop better behaviours, which in turn boost your confidence and overall health [69]. In addition, aspects of well-being including social connection and coping are positively affected by parasocial contacts on social media [64]. This highlights the need for further studies to examine how references from social media (such as influencers) shape teenagers' sense of self.

Because social media platforms tend to prioritise users' idealised self-presentations, social comparison is a common and prevalent activity there [70]. In addition, it promotes social isolation and the adoption of media ideas as one's own [71]. But they also let you check your identity expression for different audiences [73] and get information from other profiles that help with self-verification [72].

With the help of social media, people are able to feel more connected to one another and form deeper friendships with their peers than they would in the "real" world. The processes of identity formation may be aided by the interaction that takes place in online communities, providing opportunity to investigate, uphold, or re-evaluate their convictions [74]. This is amplified and changed by digital space, and it happens much too fast for teenagers to understand. However, for many teens, this method of communicating online provides a safe place to listen to one another (via comments and responses to online publications) and to discuss the various struggles they're having with building their identities [68]. We need further studies to determine the exact ways in which social media affects the dynamics of identity formation, particularly as they pertain to the steps of committing, exploring deeply, and then either maintaining or reconsidering those commitments [75]. Finding out how people feel their identity has remained consistent over time (by comparing their current self-portrait with older ones, for instance, on social media) and how this contributes to their feeling of self-affirmation would be another fascinating area to investigate [66].

INFLUENCES ON DECISION-MAKING PROCESSES

A discordance between the emotional and cognitive systems that promote behaviour execution (such as craving, salient perception of trigger stimuli, and reward expectancy) and the cognitive systems that regulate impulsive reactions, thoughts, and desires (such as inhibitory control and executive functions) may lead to addictive behaviours, including some forms of PUI [76]. This idea unites the perspectives of neuropsychologists and behavioural economists in suggesting that PUI is linked to harmful decision-making, specifically engaging in a particular activity over and over again despite the negative effects it has on a daily basis and its long-term effects [77]. A common way to measure decision-making is with the Iowa Gambling Task (IGT; [78]). This task, along with others, may



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

involve two neural loops: one for affective processing, which includes the orbitofrontal cortex (OFC), ventral striatum/ nucleus accumbency, and amygdala; and another for reflective processing, which involves an executive/cognitive loop, which includes the dorsolateral prefrontal cortex (dlPFC), anterior cingulate cortex (ACC), and dorsal striatum [79]. Both kind of procedures have the potential to affect how people make decisions. Affective processes are linked to impulsive actions and mainly comprise processing immediate (expected) rewards or losses/threats and related emotions, in contrast to reflective processes, which are linked to cognitive control and mainly involve inhibition, planning, and the pursuit of goals (including response inhibition) [80].

There is evidence that suggests a correlation between the severity of addiction and impulsive choices, such as a stronger preference for smaller rewards that are given sooner rather than later, and with problems with response inhibition, as shown by poor performance on the Go/NoGo and Stop-Signal tasks. The latter was found for much addictive behaviour, such as substance-related disorders (excluding cannabis and opioids) and gambling problem, but evidence for PUI was inconsistent. Ioannidis et al. [83] saw evidence for abnormalities in these areas of cognitive performance, as well as in working memory and decision-making, in a comprehensive meta-analysis on PUI that included 40 researches. Results from research using several gambling tasks, including the IGT, GDT, CGT, and BART, were compiled in the decision-making domain [84], [85–86], and [87] respectively. This provides a sufficient foundational understanding of many different areas of cognitive science. But when we look at decision-making domains in more detail, we see that the tasks used vary, especially when it comes to the cognitive and emotional functions that may be involved in various decision-making processes (e.g., [88]).

When it comes to gambling tasks used in (neuro-) cognitive research, there are two main types. One type, known as decisions under objective or known risk, provides explicit information about the outcomes and risks of each option. The other type, known as decisions under ambiguous or unknown risk, requires inferring the chances and risks of options by processing the outputs of previous rounds. Examples of the latter are IGT and BART. (A) Participants in objective risk circumstances may utilise the knowledge provided to make strategic decisions ahead of time, without having to test out various approaches to see what works best. The best judgements in these cases may be the result of a combination of cognitive/rational processing and emotional/affective feedback processing; tho [89]. (B) In cases of unclear risk, participants need to learn from their mistakes and reflect on the results of their decisions before they can assess the risks and rewards of each alternative. Hence, it's possible that "feelings," assumptions, and gut reactions to certain choices have a significant role in how well one does on such tasks [90]. Consequently, a propensity toward higher risk-taking is indicated by unfavourable decision-making when faced with (objective) risk. Possible causes include an increased propensity for risk-taking and/or difficulties with executive functioning or processing probability [91–92]. On the other hand, executive functions have less of an impact on decision-making behaviour when faced with uncertainty. Rather, poor decision-making in the face of ambiguity may



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

be an indication of impaired emotional behavioural control, or a lack of physiological signals that signal (high) risk in terms of potential adverse outcomes [93].

The executive processes and other cognitive components often linked with decision-making in situations of objective risk have been related with better performance on the IGT (ambiguous risk), according to several studies [94]. Some have hypothesised that as the IGT progresses thru its rounds, participants learn the rules of the task better, leading to later trials that evaluate judgements with more objectivity and less uncertainty in the risk they face [94]. Therefore, in order to discriminate between the various decision-making domains, it is crucial to compute performance metrics in the IGT independently for the earlier stages (ambiguity) and the later phases (risk).

To better understand the cognitive characteristics of people with substance-use disorders, behavioural addiction researchers have begun to rely more and more on computerised decision-making tasks. Along with the previously cited meta-analysis by Ioannidis et al. [83], Yao et al. [96] also examined gaming disorder in a recent meta-analysis that was not preregistered. Using 24 investigations, they found that people with and without gaming disorder vary slightly but significantly in how they make decisions connected to rewards (Hedge's $g = -0.45$, $p < .01$). A key difference between our method and Yao and colleagues' meta-analysis is that the former includes studies with tasks like delay discounting or reinforcement learning that do not reveal whether a decision was advantageous or disadvantageous in high- or low-risk scenarios, or tasks that gave equally likely gains or losses (50/50). Using ambiguity, risk, and intertemporal decision-making domains as moderators, it was shown that effect sizes were comparable across all domains [95].

CONCLUSION

Adolescents' cognitive and behavioural environments for developing their ideas, perceptions, and decision-making skills have been greatly impacted by the advent of social media. According to research, the impact of social media on teenagers relies on their specific use of these platforms, as well as their level of involvement and the goals they want to achieve. Promotes interest, learning, communication, and critical thinking when different information, educational materials, social contact, and opposing perspectives are easily accessible. However, biased or hasty decision-making may result from exposure to emotionally charged material, social comparison, peer pressure, algorithm-driven content, and disinformation.

The significance of critical thinking skills among teenagers is becoming more recognised in the ever-changing social media landscape. In today's information-overloaded world, it is more important than ever to be able to check facts, identify bias, differentiate between reliable sources and deceptive material, and weigh different points of view. Instead of blindly following trends, getting approval from friends, or just relying on what they've seen before, teens with high digital and media literacy abilities can evaluate online material critically.



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

In the overall picture the complicated and multi-dimensional relationship between the emergence of social media and the thought processes of the adolescents is a challenging topic. As teaching media responsibility, critical use of media, and use of information carefully to make decisions – and reduce social media use – should be a priority. With the help of parents, teachers, schools, lawmakers and social media websites, a better, safer internet can be created for everyone. Future studies should investigate, in a longitudinal and empirical manner, how the different types of social media use are influenced by age, culture and socioeconomic status on the cognition of adolescents. While reducing the negative impact on adolescents' cognitive processes, these initiatives may enable social media reach its full educational and developmental potential.

AUTHOR(S) CONTRIBUTION

The writers affirm that they have no connections to, or engagement with, any group or body that provides financial or non-financial assistance for the topics or resources covered in this manuscript.

CONFLICTS OF INTEREST

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

PLAGIARISM POLICY

All authors declare that any kind of violation of plagiarism, copyright and ethical matters will take care by all authors. Journal and editors are not liable for aforesaid matters.

SOURCES OF FUNDING

The authors received no financial aid to support for the research.

REFERENCES

- Rodríguez de Dios, I. I., Iguarta, J. J., & González-Vázquez, A. (2016). Development and validation of a digital literacy scale for teenagers. In *Proceedings of the Fourth International Conference on Technological Ecosystems for Enhancing Multiculturality (TEEM '16)*. Association for Computing Machinery. <https://doi.org/10.1145/3012430.3012648>
- European Commission. (2023, July 14). *96% of young people in the EU use the internet daily*. <https://shorturl.at/1FPSX>
- Potter, W. J. (2010). The state of media literacy. *Journal of Broadcasting & Electronic Media*, 54(4), 675–696. <https://doi.org/10.1080/08838151.2011.521462>
- Langmeier, J., & Krejčířová, D. (2006). *Vývojová psychologie* (2nd ed.). Grada Publishing.
- Lessenski, M. (2022, October). *How it started, how it is going: Media Literacy Index 2022*. Open Society Institute–Sofia. https://osis.bg/wp-content/uploads/2022/10/HowItStarted_MediaLiteracyIndex2022_ENG_.pdf



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

Watson, G., & Glaser, E. M. (1980). *The Watson-Glaser critical thinking appraisal*. Psychological Corporation.

Facione, N. C. (1997). *Critical thinking assessment in nursing education programs: An aggregate data-analysis*. California Academic Press.

Bers, T. H., McGowan, M., & Rubin, A. (1996). The disposition to think critically among community college students: The California Critical Thinking Disposition Inventory. *The Journal of General Education*, 45(3), 197–223.

Fong, C. J., Kim, Y., Davis, C. W., Hoang, T., & Kim, Y. W. (2017). A meta-analysis on critical thinking and community college student achievement. *Thinking Skills and Creativity*, 26, 71–83.

Ma, X., Zhang, Y., & Luo, X. (2021). Students' and teachers' critical thinking in science education: Are they related to each other and with physics achievement? *Research in Science & Technological Education*.

Puzziferro, M. (2006). *Online technologies self-efficacy, self-regulated learning, and experiential variables as predictors of final grade and satisfaction in college-level online courses*, New York University, New York..

Singleton-Williams, S. D. (2009). *Motivational and cognitive learning strategies as predictors of academic success in economically disadvantaged community college students*, Unpublished doctoral dissertation, Capella University, Minneapolis, MN.

Shirazi, F., & Heidari, S. (2019). The relationship between critical thinking skills and learning styles and academic achievement of nursing students. *The Journal of Nursing Research*, 27(4), e38. <https://doi.org/10.1097/jnr.0000000000000307>

Thompson, J. (2009). *To question or not to question: The effects of two teaching approaches on students' thinking dispositions, critical thinking skills, and course grades in a critical thinking course* [Doctoral dissertation, Capella University].

Foust, R. A. (2008). *Learning strategies, motivation, and self-reported academic outcomes of students enrolled in web-based coursework*. Unpublished doctoral dissertation, Capella University, Minneapolis, MN.

Mieczkowski, H., Lee, A. Y., & Hancock, J. T. (2020). Priming effects of social media use scales on well-being outcomes: The influence of intensity and addiction scales on self-reported depression. *Social Media + Society*, 6(4), 2056305120961784. <https://doi.org/10.1177/2056305120961784>

Jenkins-Guarnieri, M. A., Wright, S. L., & Johnson, B. (2013). Development and validation of a social media use integration scale. *Psychology of Popular Media Culture*, 2(1), 38–50. <https://doi.org/10.1037/a0030277>



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

Xu, H., Gong, Y., Zhang, Q., & Xie, J. (2019). Relationship between social media activities and thinking styles. *Marketing Intelligence & Planning*.

Sumanti, S., Efendi, Z. M., & Ridwan, R. (2019). Online group investigation by using Facebook to improve students' critical thinking on geography subjects. In *Proceedings of the 1st International Conference on Innovation in Education (ICoIE 2018)* (pp. 130–131). Atlantis Press.

Kustijono, R., & Zuhri, F. (2018). The use of Facebook and WhatsApp application in learning process of physics to train students' critical thinking skills. *IOP Conference Series: Materials Science and Engineering*, 296(1), 012025.

Zulkifli, N. N., Abd Halim, N. D., Yahaya, N., & van der Meijden, H. (2020). Patterns of critical thinking processing in online reciprocal peer tutoring through Facebook discussion. *IEEE Access*, 8, 24269–24283. <https://doi.org/10.1109/ACCESS.2020.2969313>

Wei, L., & Zhang, M. X. (2006). The third digital divide: The knowledge gap on the Internet. *Journalism and Communication*, 13(4), 43–53.

Tien, F. F., & Fu, T. T. (2008). The correlates of the digital divide and their impact on college student learning. *Computers & Education*, 50(1), 421–436. <https://doi.org/10.1016/j.compedu.2006.07.005>

Kuh, G. D., & Vesper, N. (2001). Do computers enhance or detract from student learning? *Research in Higher Education*, 42(1), 87–102.

Kim, H. (2014). Enacted social support on social media and subjective well-being. *International Journal of Communication*, 8, 2340–2357.

Wang, Z., Tchernev, J. M., & Solloway, T. (2012). A dynamic longitudinal examination of social media use, needs, and gratifications among college students. *Computers in Human Behavior*, 28(5), 1829–1839. <https://doi.org/10.1016/j.chb.2012.05.001>

Cao, X., Masood, A., Luqman, A., & Ali, A. (2018). Excessive use of mobile social networking sites and poor academic performance: Antecedents and consequences from stressor-strain-outcome perspective. *Computers in Human Behavior*, 85, 163–174. <https://doi.org/10.1016/j.chb.2018.03.023>

Andreassen, C. S. (2015). Online social network site addiction: A comprehensive review. *Current Addiction Reports*, 2(2), 175–184. <https://doi.org/10.1007/s40429-015-0056-9>

Hou, Y., Xiong, D., Jiang, T., Song, L., & Wang, Q. (2019). Social media addiction: Its impact, mediation, and intervention. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 13(1), Article 4. <https://doi.org/10.5817/CP2019-1-4>

Huang, H. (2014). *Social media generation in urban China*. Springer.



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

Lau, W. W. F. (2017). Effects of social media usage and social media multitasking on the academic performance of university students. *Computers in Human Behavior*, 68, 286–291. <https://doi.org/10.1016/j.chb.2016.11.043>

Leyrer-Jackson, J. M., & Wilson, A. K. (2017). The associations between social-media use and academic performance among undergraduate students in biology. *Journal of Biological Education*, 51(4), 415–423.

Liu, Z. S. (2013). Social media dependence and media demand: A case study of college students' microblog dependence. *Journalism Bimonthly*, (1), 124–134.

Lee, O. S., & Kim, M. J. (2017). The relationship among smartphone addiction, emotional intelligence, critical thinking disposition and communication skill for nursing students. *Journal of Digital Convergence*, 15(7), 319–328.

Thomas, D. (2020). Social media addiction, critical thinking and achievement emotions among EFL students in Thailand. *Asia Pacific Journal of Educators and Education*, 35(1), 157–171.

Jiang, T., Hou, Y., & Wang, Q. (2016). Does micro-blogging make us “shallow”? Sharing information online interferes with information comprehension. *Computers in Human Behavior*, 59, 210–214. <https://doi.org/10.1016/j.chb.2016.02.008>

Peng, L. (2019). Connection and anti-connection: The swing of Internet rules. *Chinese Journal of Journalism and Communication*, 41(2), 20–37.

Bright, L. F., Kleiser, S. B., & Grau, S. L. (2015). Too much Facebook? An exploratory examination of social media fatigue. *Computers in Human Behavior*, 44, 148–155. <https://doi.org/10.1016/j.chb.2014.11.048>

Liu, Y., & He, J. (2021). Why are you running away from social media? Analysis of the factors influencing social media fatigue: An empirical data study based on Chinese youth. *Frontiers in Psychology*, 12, Article 1467. <https://doi.org/10.3389/fpsyg.2021.638981>

Ravindran, T., Chua, A. Y. K., & Hoe-Lian, D. (2013). Characteristics of social network fatigue. In *2013 10th International Conference on Information Technology: New Generations* (pp. 431–438). IEEE. <https://doi.org/10.1109/ITNG.2013.71>

Xue, J., & Hong, J. W. (2020). A study on the influencing factors of social media fatigue in youth groups from the perspective of role stress: Taking WeChat Moments as an example. *Journalism and Mass Communication Monthly*, (7), 21–40.

Malik, A., Dhir, A., Kaur, P., & Johri, A. (2020). Correlates of social media fatigue and academic performance decrement: A large cross-sectional study. *Information Technology & People*, 34(2), 557–580. <https://doi.org/10.1108/ITP-06-2019-0289>



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

Kirschner, P. A., & Karpinski, A. C. (2010). Facebook® and academic performance. *Computers in Human Behavior*, 26(6), 1237–1245. <https://doi.org/10.1016/j.chb.2010.03.024>

Paul, R. W., & Elder, L. (2003). *La mini-guía para el pensamiento crítico: Conceptos y herramientas*. Fundación para el Pensamiento Crítico. <https://t.ly/8I3GB>

Watson, G., & Glaser, E. M. (2000). *Watson-Glaserov test hodnotenia kritického myslenia*. Psychodiagnostika.

Frederick, S. (2005). Cognitive reflection and decision making. *Journal of Economic Perspectives*, 19(4), 25–42. <https://doi.org/10.1257/089533005775196732>

Sinayev, A., & Peters, E. (2015). Cognitive reflection vs. calculation in decision making. *Frontiers in Psychology*, 6, 54. <https://doi.org/10.3389/fpsyg.2015.00532>

Sirota, M., Dewberry, C., Juanchich, M., Valuš, L., & Marshall, C. A. (2021). Measuring cognitive reflection without maths: Development and validation of the Verbal Cognitive Reflection Test. *Journal of Behavioral Decision Making*, 34(3), 322–343. <https://doi.org/10.1002/bdm.2213>

Kahneman, D. (2011). *Myšlení: Rychlé a pomalé*. Jan Melvil Publishing.

Ali, F. H., & Qazi, A. A. (2018). Are social networking sites suitable for formal learning among business research students? A mixed-method experimental approach. *Bulletin of Education and Research*, 40(1), 267–284. <https://doi.org/10.4324/9781315563671-15>

Cheng, X., Cao, Q., & Liao, S. S. (2022). An overview of literature on COVID-19, MERS and SARS: Using text mining and latent Dirichlet allocation. *Journal of Information Science*, 48(3), 304–320. <https://doi.org/10.1177/0165551520954674>

Nanath, K., Kaitheri, S., Malik, S., & Mustafa, S. (2022). Examination of fake news from a viral perspective: An interplay of emotions, resonance, and sentiments. *Journal of Systems and Information Technology*, 24(2), 131–155. <https://doi.org/10.1108/JSIT-11-2020-0257>

Skoric, M. M., Liu, J., & Jaidka, K. (2020). Electoral and public opinion forecasts with social media data: A meta-analysis. *Information*, 11(4), 187. <https://doi.org/10.3390/info11040187>

Lavertu, A., Hamamsy, T., & Altman, R. B. (2021). Quantifying the severity of adverse drug reactions using social media: Network analysis. *Journal of Medical Internet Research*, 23(10), e27714. <https://doi.org/10.2196/27714>

Shah, A. M., Yan, X., Tariq, S., & Khan, S. (2021). Listening to the patient voice: Using a sentic computing model to evaluate physicians' healthcare service quality for strategic planning in hospitals. *Quality & Quantity*, 55, 173–201. <https://doi.org/10.1007/s11135-020-00999-3>

Lyu, J. C., & Luli, G. K. (2021). Understanding the public discussion about the Centers for Disease Control and Prevention during the COVID-19 pandemic using Twitter data: Text mining



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

analysis study. *Journal of Medical Internet Research*, 23(2), e25108. <https://doi.org/10.2196/25108>

Brailovskaia, J., Ströse, F., Schillack, H., & Margraf, J. (2020). Less Facebook use—More well-being and a healthier lifestyle? An experimental intervention study. *Computers in Human Behavior*, 108, 106332. <https://doi.org/10.1016/j.chb.2020.106332>

Hobbs, R., & Coiro, J. (2019). Design features of a professional development program in digital literacy. *Journal of Adolescent & Adult Literacy*, 62(4), 401–409.

Livingstone, S., Stoilova, M., & Nandagiri, R. (2020). Data and privacy literacy. In D. Frau-Meigs, S. Kotilainen, M. Pathak-Shelat, M. Hoechsmann, & S. R. Poyntz (Eds.), *The handbook of media education research* (pp. 413–425). Wiley.

Economic Commission for Latin America and the Caribbean. (2022, April 28). *Digital technologies for a new future*. <https://www.cepal.org/en/publications/46817-digital-technologies-new-future>

UNESCO. (2013). *Media and information literacy: Policy and strategy guidelines*. UNESCO Publishing. <https://unesdoc.unesco.org/ark:/48223/pf0000225606>

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. B., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>

Siddaway, A. P., Wood, A. M., & Hedges, L. V. (2019). How to do a systematic review: A best practice guide for conducting and reporting narrative reviews, meta-analyses, and meta-syntheses. *Annual Review of Psychology*, 70, 747–770. <https://doi.org/10.1146/annurev-psych-010418-102803>

Hoffner, C., & Bond, B. (2022). Parasocial relationships, social media, & well-being. *Current Opinion in Psychology*, 45, 101306. <https://doi.org/10.1016/j.copsyc.2022.101306>

Popovac, M., & Hadlington, L. (2020). Exploring the role of egocentrism and fear of missing out on online risk behaviours among adolescents in South Africa. *International Journal of Adolescence and Youth*, 25(1), 276–291. <https://doi.org/10.1080/02673843.2019.1617171>

Shankleman, M., Hammond, L., & Jones, F. (2021). Adolescent social media use and well-being: A systematic review and thematic meta-synthesis. *Adolescent Research Review*, 6, 471–492. <https://doi.org/10.1007/s40894-021-00154-5>

Meier, A., & Johnson, B. (2022). Social comparison and envy on social media: A critical review. *Current Opinion in Psychology*, 45, 101302. <https://doi.org/10.1016/j.copsyc.2022.101302>



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

Lajnef, K. (2023). The effect of social media influencers' on teenagers behavior: An empirical study using cognitive map technique. *Current Psychology*. <https://doi.org/10.1007/s12144-023-04273-1>

Cingel, D., Carter, M., & Krause, H. (2022). Social media and self-esteem. *Current Opinion in Psychology*, 45, 101304. <https://doi.org/10.1016/j.copsyc.2022.101304>

Verduyn, P., Gugushvili, N., Massar, K., Täht, K., & Kross, E. (2020). Social comparison on social networking sites. *Current Opinion in Psychology*, 36, 32–37. <https://doi.org/10.1016/j.copsyc.2020.04.002>

Midgley, C., Thai, S., Lockwood, P., Kovacheff, C., & Page-Gould, E. (2021). When every day is a high school reunion: Social media comparisons and self-esteem. *Journal of Personality and Social Psychology*, 121(2), 285–307. <https://doi.org/10.1037/pspi0000336>

Swann, W. B., Jr. (1983). Self-verification: Bringing social reality into harmony with the self. In J. Suls & A. G. Greenwald (Eds.), *Psychological perspectives on the self* (Vol. 2, pp. 33–66). Erlbaum.

Meier, A., & Johnson, B. (2022). Social comparison and envy on social media: A critical review. *Current Opinion in Psychology*, 45, 101302. <https://doi.org/10.1016/j.copsyc.2022.101302>

Branje, S., de Moor, E., Spitzer, J., & Becht, A. (2021). Dynamics of identity development in adolescence: A decade in review. *Journal of Research on Adolescence*, 31(4), 908–927. <https://doi.org/10.1111/jora.12678>

Crocetti, E. (2017). Identity formation in adolescence: The dynamic of forming and consolidating identity commitments. *Child Development Perspectives*, 11, 145–150. <https://doi.org/10.1111/cdep.12226>

Brand, M., Rumpf, H.-J., Demetrovics, Z., Müller, A., Stark, R., King, D. L., Fineberg, N. A., & others. (2022). Which conditions should be considered as disorders in the International Classification of Diseases (ICD-11) designation of “other specified disorders due to addictive behaviors”? *Journal of Behavioral Addictions*, 11(2), 150–159. <https://doi.org/10.1556/2006.2020.0003>

Bechara, A., & Damasio, A. R. (2005). The somatic marker hypothesis: A neural theory of economic decision. *Games and Economic Behavior*, 52(2), 336–372. <https://doi.org/10.1016/j.geb.2004.06.01>

Bechara, A., Damasio, A. R., Damasio, H., & Anderson, S. W. (1994). Insensitivity to future consequences following damage to human prefrontal cortex. *Cognition*, 50(1–3), 7–15. [https://doi.org/10.1016/0010-0277\(94\)90018-3](https://doi.org/10.1016/0010-0277(94)90018-3)

Brand, M., Wegmann, E., Stark, R., Müller, A., Wölfling, K., Robbins, T. W., & Potenza, M. N. (2019). The Interaction of Person-Affect-Cognition-Execution (I-PACE) model for addictive



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

behaviors: Update, generalization to addictive behaviors beyond Internet-use disorders, and specification of the process character of addictive behaviors. *Neuroscience & Biobehavioral Reviews*, 104, 1–10. <https://doi.org/10.1016/j.neubiorev.2019.06.032>

van den Bos, R., Homberg, J., & de Visser, L. (2013). A critical review of sex differences in decision-making tasks: Focus on the Iowa Gambling Task. *Behavioural Brain Research*, 238, 95–108. <https://doi.org/10.1016/j.bbr.2012.10.002>

Amlung, M., Vedelago, L., Acker, J., Balodis, I., & MacKillop, J. (2017). Steep delay discounting and addictive behavior: A meta-analysis of continuous associations. *Addiction*, 112(1), 51–62. <https://doi.org/10.1111/add.13535>

Smith, J. L., Mattick, R. P., Jamadar, S. D., & Iredale, J. M. (2014). Deficits in behavioural inhibition in substance abuse and addiction: A meta-analysis. *Drug and Alcohol Dependence*, 145, 1–33. <https://doi.org/10.1016/j.drugalcdep.2014.08.009>

Ioannidis, K., Hook, R., Goudriaan, A. E., Vlies, S., Fineberg, N. A., Grant, J. E., & Chamberlain, S. R. (2019). Cognitive deficits in problematic Internet use: A meta-analysis of 40 studies. *British Journal of Psychiatry*, 215(5), 639–646. <https://doi.org/10.1192/bjp.2019.3>

Brand, M., Fujiwara, E., Borsutzky, S., Kalbe, F., Kessler, J., & Markowitsch, H. J. (2005). Decision-making deficits of Korsakoff patients in a new gambling task with explicit rules: Associations with executive functions. *Neuropsychology*, 19(3), 267–277. <https://doi.org/10.1037/0894-4105.19.3.267>

Rogers, R. D., Everitt, B. J., Baldacchino, A., Blackshaw, A. J., Swainson, R., Wynne, K., Baker, N. B., Hunter, J., Carthy, T., Booker, E., London, M., Deakin, J. F. W., Sahakian, B. J., & Robbins, T. W. (1999). Dissociable deficits in the decision-making cognition of chronic amphetamine abusers, opiate abusers, patients with focal damage to prefrontal cortex, and tryptophan-depleted normal volunteers: Evidence for monoaminergic mechanisms. *Neuropsychopharmacology*, 20(4), 322–339. [https://doi.org/10.1016/S0893-133X\(98\)00091-8](https://doi.org/10.1016/S0893-133X(98)00091-8)

Rogers, R. D., Owen, A. M., Middleton, H. C., Williams, E. J., Pickard, J. D., Sahakian, B. J., & Robbins, T. W. (1999). Choosing between small, likely rewards and large, unlikely rewards activates inferior and orbital prefrontal cortex. *The Journal of Neuroscience*, 19(20), 9029–9038. <https://doi.org/10.1523/JNEUROSCI.19-20-09029.1999>

Lejuez, C. W., Read, J. P., Kahler, C. W., Richards, J. B., Ramsey, S. E., Stuart, G. L., Strong, D. R., & Brown, R. A. (2002). Evaluation of a behavioral measure of risk taking: The Balloon Analogue Risk Task (BART). *Journal of Experimental Psychology: Applied*, 8(2), 75–84. <https://doi.org/10.1037/1076-898X.8.2.75>



Kapil Vyas (2026). Social Media Evolution and Adolescent Thought Processes: Examining Changes in Critical Thinking, Perception, and Decision-Making. *International Journal of Multidisciplinary Research & Reviews*, 5(5),498-516.

Schiebener, J., & Brand, M. (2015). Decision making under objective risk conditions—A review of cognitive and emotional correlates, strategies, feedback processing, and external influences. *Neuropsychology Review*, 25(2), 1–28. <https://doi.org/10.1007/s11065-015-9285-x>

Bechara, A., & Damasio, A. R. (2005). The somatic marker hypothesis: A neural theory of economic decision. *Games and Economic Behavior*, 52(2), 336–372. <https://doi.org/10.1016/j.geb.2004.06.01>

Bechara, A. (2004). The role of emotion in decision-making: Evidence from neurological patients with orbitofrontal damage. *Brain and Cognition*, 55(1), 30–40. <https://doi.org/10.1016/j.bandc.2003.12.029>

Schiebener, J., Zamarian, L., Delazer, M., & Brand, M. (2011). Executive functions, categorization of probabilities, and learning from feedback: What does really matter for decision making under explicit risk conditions? *Journal of Clinical and Experimental Neuropsychology*, 33(9), 1025–1039. <https://doi.org/10.1080/13803395.2011.595702>

Schiebener, J., Wegmann, E., Gathmann, B., Laier, C., Pawlikowski, M., & Brand, M. (2014). Among three different executive functions, general executive control ability is a key predictor of decision making under objective risk. *Frontiers in Psychology*, 5, 1386. <https://doi.org/10.3389/fpsyg.2014.01386>

Toplak, M. E., Sorge, G. B., Benoit, A., West, R. F., & Stanovich, K. E. (2010). Decision-making and cognitive abilities: A review of associations between Iowa Gambling Task performance, executive functions, and intelligence. *Clinical Psychology Review*, 30(5), 562–581. <https://doi.org/10.1016/j.cpr.2010.04.002>

Brand, M., Recknor, E. C., Grabenhorst, F., & Bechara, A. (2007). Decisions under ambiguity and decisions under risk: Correlations with executive functions and comparisons of two different gambling tasks with implicit and explicit rules. *Journal of Clinical and Experimental Neuropsychology*, 29(1), 86–99. <https://doi.org/10.1080/13803390500507196>

Yao, Y.-W., Zhang, J.-T., Fang, X.-Y., Liu, L., & Potenza, M. N. (2022). Reward-related decision-making deficits in Internet gaming disorder: A systematic review and meta-analysis. *Addiction*, 117(1), 19–32. <https://doi.org/10.1111/add.1551>

