MAPAN-JOURNAL ,
Publisher: METROLOGY SOC INDIA , NPL PREMISES,
Address: DR K S KRISHNAN MARG, NEW DELHI, INDIA,
ISSN / eISSN:0970-3950 / 0974-9853
Volume 25-Issue 1-(2025)
https://doi-001.org/1025/17662517508186

OPEN ACCESS

Digital Immersion and the Production of Fragmented Selves among Algerian Youth: A Mixed-Method Reading of the Algorithmic Dimension of Digital Identities

Check for updates

Khalil ELAGUAB [1], Mohammed REGGAB [2]

[1] University of Blida2 (Algeria) **.** Email: ek.elaguab@univ-blida2.com, Orcid: 0009-0003-3925-9175

[2] University of Djelfa (Algeria), ; Orcid: 0009-0003-8071-9014 . Email: mohammed.reggab@univ-djelfa.dz

Received: 01/09/2025 ; Accepted: 22/11/2025

Abstract

This study examines the relationship between digital immersion and identity fragmentation among Algerian youth on social media using a mixed-methods sequential explanatory design (QUAN→QUAL). Findings reveal that immersion is a structural variable reshaping time perception, awareness, and identity, showing a moderate-to-strong correlation ($r \approx 0.42$) with identity fragmentation. The split appears mainly as a discursive–representational gap, where emotion becomes central to digital self-construction.

The findings demonstrate how algorithms use attentional and affective mechanisms to not only arrange content but also to mold identities. The report recommends a multi-level strategy that combines institutional accountability, algorithmic media literacy, and individual awareness.

Keywords: Digital Immersion, Identity Fragmentation, Algorithms, Digital Identity, Algerian Youth, Attention Economy. Keywords: Digital Immersion, Identity Fragmentation, Algorithms, Digital Identity, Algerian Youth, Attention Economy.

Introduction

The digital revolution and the emergence of social media have caused significant changes in human communication patterns during the last 20 years. These platforms have evolved from being merely venues for information sharing or amusement to being a social and cultural infrastructure that shapes people's everyday lives, especially for young people. These days, social media serves as the main platform for news consumption, relationship development, self-expression, and identity performance.

The idea of immersion has grown increasingly popular in this context, referring to a state of intense engagement with the digital experience in which users lose track of time and become emotionally and cognitively engrossed in the virtual world's content. This immersion transcends casual usage and evolves into a lifestyle pattern that reshapes cognition, social relations, and cultural representations.

At the same time, immersion raises a central issue related to identity. With the expansion of the digital sphere and the multiplicity of its platforms, young people have begun to experience what can be described as an identity split between what they display on social media (the digital self) and what they live in their offline environment (the real self). This split takes multiple forms:

Linguistic and stylistic differences (using Algerian Arabic, French, or “Franco-Arab” online versus everyday language offline).

Visual differences (digitally filtered and idealized images versus ordinary real-life appearance).

Behavioral differences (greater boldness in online expression versus restraint in face-to-face settings).

In the Algerian context, where the social and cultural dimensions intersect with economic and political pressures, this issue becomes even more significant. Social media today represents the most influential arena in shaping young people’s social and political representations, and even in producing new social realities. Through immersion, this virtual space turns into a field for crafting multiple and fragmented identities that may open horizons of expression and emancipation, but that may also lead to internal conflicts and social pressures.

This article, therefore, aims to deconstruct the relationship between immersion in social media and representations of identity split among Algerian youth, through a dual approach that combines quantitative analysis (measuring levels of immersion and indicators of identity) with qualitative analysis (understanding young people’s experiences and discourses). The study of this relationship goes beyond the individual or psychological dimension to open up a broader debate about the reconfiguration of identity in Algerian society under digital globalization—where the local intersects with the global, the traditional with the modern, and the real with the virtual. This makes the present study a necessary scientific contribution to understanding youth identity transformations in the age of social media.

Immersion The Concept of Immersion's Psychological Foundations

In the 1970s, psychologist Mihaly Csikszentmihalyi invented the concept of flow, which is an expansion of the idea of immersion. This idea explained how people might achieve the highest levels of engagement and satisfaction when completely engaged in a specific task, which was a breakthrough in positive and cognitive psychology.

In his groundbreaking book Flow: The Psychology of Optimal Experience (1990), Csikszentmihalyi defines flow as a state of mind where people lose track of time and enjoy the process for its own sake because they are so engrossed in an activity (Csikszentmihalyi, 1990, p. 4). This condition, which is

marked by intense focus, regulated attention, a sense of mastery, and genuine satisfaction, is not a passing instant but rather a comprehensive experience.

According to cognitive theory, immersion happens when a person's level of difficulty corresponds with their skill level. Anxiety arises if the challenge is too difficult for the person; boredom results if it is too easy. When balance is achieved, the person enters the flow experience (Csikszentmihalyi & Csikszentmihalyi, 1988, p. 263). Hence, immersion is not mere preoccupation but a dynamic state that requires a delicate equilibrium between internal capabilities and external stimuli.

On the emotional level, immersion comprises several core dimensions (Csikszentmihalyi, 1997, pp. 29–31):

- Focused attention: Concentrating entirely on the activity while excluding external distractions.
- The distortion of duration: Hours seeming like minutes.
- Sense of control: The mental perception that one can influence an event or action.
- Enjoying an activity for its own sake, independent of its results, is known as intrinsic enjoyment.

Research indicates that these factors interact in intricate ways: a sense of control controls anxiety, intrinsic enjoyment encourages sustained engagement, and focused attention increases the loss of time awareness. As digital media became more widely used, the idea was broadened to encompass interactive settings. According to Hoffman and Novak (1996), the Internet offers the perfect setting for experiencing flow because it blends instantaneous interaction with an immersive variety of content (p. 60). They noted that web users can enter states of immersion similar to those described by Csikszentmihalyi in creative or athletic contexts.

This benefit of immersion, however, spurred discussions about its drawbacks, particularly in digital settings. Subsequent research has shown that extreme immersion may be associated with addictive symptoms as difficulties disengaging from platforms, guilt after extended use, and loss of time control (Khang, Kim, & Kim, 2013, p. 2482). Thus, immersion's dual nature becomes apparent: on the one hand, it can be a pleasant experience that encourages creativity and learning, but on the other, it can also result in a compulsive condition that can cause behavioral and social issues.

Participation in Media and Communication

A significant turning point in the development of communication studies was the introduction of the immersion concept from psychology to the media and communication domain. Although the concept was first applied to characterize distinct states associated with artistic or athletic endeavors, its use in media studies shown its capacity to explain the interplay between people, technology, and digital media.

1. **From Receiving Passively to Using Immersively**

In traditional media, including radio and television, audiences were frequently depicted as passive recipients of media messages. However, the rise of the Internet has radically changed this equation by opening the door to interactive experiences that allow users to control, produce, and redistribute content. In this context, Hoffman and Novak (1996, p. 60) argue that the Internet constitutes an ideal environment for creating "flow" experiences, since it combines real-time interactivity, content richness, and the ability to personalize the experience according to individual interests. In this context, immersion serves as the process that converts the user from a passive recipient into an engaged participant in the construction of the media experience. This theoretical shift holds considerable importance as it transforms the dynamics between audiences and media. Media is now perceived not merely as a straightforward transmitter of reality, but as an environment where reality can be reconstructed through interactive engagement.

2. Immersion as a Design Approach

Since the mid-2000s, immersion has been recognized as both a psychological phenomenon and a strategic design mechanism employed by technology companies. Anderson et al. (2016, pp. 94–95) show that techniques such as infinite scroll and push notifications were intentionally designed to keep users engaged with platforms for as long as possible. These strategies operate not merely at the level of content but at the level of users' cognitive and affective architecture. The examination indicates that digital immersion is not wholly organic or instinctive; instead, it is meticulously crafted. The platform proactively establishes the necessary conditions for user engagement, rather than passively waiting for users to immerse themselves in its content. In this context, immersion operates as a subtle form of control, where audience behavior is influenced and adjusted through intentional digital design strategies.

3. The Experience of Presence: Virtual Reality as a Different Reality

According to Lombard and Ditton (1997, p. 11), the essence of media immersion lies in what they term presence, that is, the user's feeling of being inside the media experience rather than outside it. This sense of presence explains why video games or live streaming can be far more impactful than simply reading a news article: the user is not merely consuming information but experiencing it as an alternative reality. This analysis highlights that immersion goes beyond "focused attention"; it involves a reconfiguration of the individual's perception of time and space. As such, media is not only capable of transmitting reality but of constructing parallel virtual realities that compete with everyday experience.

4. Immersion and the Construction of Media Identity

The relationship between identity-building techniques and immersion is one of the biggest changes brought about by digital media. Sundar and Limperos (2013, pp. 507–508) argue that interactivity in

digital media has generated “new gratifications” that were absent from classical uses-and-gratifications theories. These gratifications include:

- **Control**: the user feels empowered to determine the course of his or her media experience.
- **Agency**: Agency is the feeling of having control over one's own expression and influence.
- **Identity:** immersion in digital media provides individuals with opportunities to experiment with different identities and present alternative selves.

In this way, immersion is no longer limited to content consumption; it has become a social practice of self-production within the digital sphere.

5. The Crucial Aspect: Using Immersion as a Dominance Mechanism in Attention Capitalism

Fuchs (2014, pp. 72–73) presents a critical viewpoint in opposition to these hopeful viewpoints, contending that digital media immersion is everything from neutral. This viewpoint holds that digital platforms are made to draw in and retain users, then turn that attention into a commodity through advertising and the usage of personal information. Here, immersion turns into a key tool in the phenomenon known as attention capitalism, which turns people's time and awareness into resources that can be sold.

According to the critical analysis, immersion reinforces the unequal power dynamics between platform-owning companies and their users in addition to producing joyful or creative experiences.

✦ Review of Literature

Understanding how academics have approached the issue of absorption (or flow) and its relationship to both digital and offline identities requires a review of earlier research. Research on the concept's relationships to various phenomena, including as digital addiction, the quality of media experiences, identity development, and psychological well-being, has grown since it was first introduced into the field of media and communication.

Immersion and Digital Addiction

Immersion has been connected to excessive use or addiction in one of the most well-known research directions. Khang, Kim, and Kim (2013) discovered in their research on South Korean digital media users that immersion is not just a pleasurable condition but can develop into obsessive behavior that results in addiction symptoms like loss of control and a drop in academic performance(p. 2419). The study highlighted that motives such as “escaping reality” and “seeking pleasure” increase the likelihood that immersion develops into addictive use. This dimension opens a critical debate: is immersion a positive value tied to creativity and cognitive engagement, or the beginning of a path toward pathological overuse?

1. Immersion as a Condition for User Loyalty

Zhou and Lu (2011), in their study of instant messaging applications, showed that the flow experience is among the strongest variables explaining user loyalty and continued engagement with platforms (p. 157). Here, immersion becomes a mechanism that strengthens involvement in group activities and promotes platform connection rather than a bad thing. Digital marketing has made extensive use of these findings to comprehend how sensory and cognitive immersion improves engagement with advertising campaigns or companies.

2. Immersion and the Digital Identity Experience

Research by Suh, Cheung, and Lim (2015) demonstrated that immersion in social networks goes beyond mere enjoyment and is strongly tied to digital identity construction (p. 12). Their research showed that individuals who are immersed often create different online personas. This can have two effects: it can improve social bonds through intense interaction, but it can also cause a rift between online and real identities. This dimension emphasizes the dialectical relationship between identity split and immersion, making it especially pertinent to the current investigation.

3. and Several Personas in Virtual Environments

One of the first people in the West to emphasize that people can experiment with different identities on the Internet was Turkle (1995), who referred to cyberspace as a "social laboratory of the self" (pp. 178–180). The idea that absorption in digital places goes well beyond entertainment to encompass identity reconfiguration was established by her work, even though it was done before the social media era. Subsequent research by Vasalou and Joinson (2009) demonstrated that users can project more idealized identity pictures through digital interactions, which strengthens the distinction between their real and virtual selves (p. 1650). (p. 1650).

4. Arab and Local Studies

In the Arab context, many studies have focused on Facebook addiction or the impact of social media on family relations, yet few have explicitly addressed the concept of immersion. Some research in Egypt and Tunisia (e.g., El-Khouly, 2018) attempted to link excessive use of social networks with the emergence of a gap between real identity and virtual self-presentation (pp. 45–46). In Algeria, however, studies remain very limited and largely descriptive. Most focus on the role of social media in the popular movement (2019–2020) or in youth political socialization, but without a clear engagement with the concept of immersion. Because of this vacuum in the literature, the current study makes a unique contribution by clearly relating identity representations in the Algerian context to immersion.

Synthetic Evaluation of Recent Studies

Three primary conclusions may be drawn from the literature review:

- Dominance of quantitative studies: While few studies examine identity-related experiences qualitatively, the majority of research uses standardized flow scales to quantify immersion.

- Dual results: Immersion has advantages (better connections, platform loyalty), but it also has drawbacks (addiction, identity fragmentation).
- Arab–Algerian research gap: There is a clear scarcity of studies that integrate immersion with identity split, which gives the current article significant added value both scientifically and socially.

✦ ***The Classical Concept of Identity in Sociology and Communication***

1. Identity as a Central Sociological Concern

Since the early days of sociology, identity has been one of its central issues, as it raises the fundamental question: how does the individual perceive him- or herself within the group? Identity is not merely an "identification card," but rather a sense of distinctiveness and continuity that emerges from the individual's interaction with society. Here, two dimensions can be distinguished:

- The individual dimension: the person's sense of unity and continuity across time.
- The social dimension: the individual's image in the eyes of others and his or her role within the group.

Erik Erikson (1968) asserted that identity is a dynamic process that results from the interplay between the social environment and the ego. He believes that young people's identity crises are a reflection of larger societal and cultural changes rather than just a personal psychological battle (pp. 91–94). This underscores from the outset that identity can only be understood as a dialectical process between "self" and "society".

2. Goffman: Identity as Social Performance

The most influential contribution came from Erving Goffman in his seminal book The Presentation of Self in Everyday Life (1959). Identity, according to Goffman, is a theatrical performance in which a person displays themselves to others as though they were performing on a stage.

- In order to project a controlled and "calculated" image, people perform roles that fit social norms on the front stage.
- Backstage: a place where people hide from the audience's eyes and act more freely, free from societal pressure.

According to this analysis, identity is a continuous negotiation that changes depending on the circumstance and social context rather than a permanent inner essence.(Goffman, 1959, pp. 22–24.(

This identity dramaturgical perspective is groundbreaking since it:

- Breaks down the essentialist idea that identity is a fixed phenomenon.
- Draws attention to its performance aspect, which is connected to impression management techniques.

3. Berger and Luckmann: Identity as the Social Construction of Reality

In their seminal work The Social Construction of Reality (1966), Berger and Luckmann presented a more nuanced view of identity. According to them, identity develops via three social processes:

- Externalization: people use language, symbols, and customs to express who they are.
- Objectivation: these meanings and symbols take on an objective quality and are forced onto people as "social facts."
- According to Berger and Luckmann (1966), internalization occurs when people re-assimilate these meanings as essential elements of who they are (pp. 162–163).

To put it another way, identity is created within a web of social institutions and symbolic exchanges rather than being completely selected by the individual. This analysis emphasizes the dialectical nature of identity, which is both a socially imposed construct and a self-project.

4. Stuart Hall: Identity as Discourse and Representation

Stuart Hall (1996) expanded on this viewpoint in the field of cultural studies, contending that identity is a narrative process created by cultural and media discourses rather than a "essence" (pp. 4–5). Through representational mechanisms, media and culture actively contribute to the creation of identity rather than just "reflecting" it.

Because identity is constantly ambiguous, subject to negotiation, and indicative of the power dynamics between dominant and resistance discourses, this method enables us to view identity as a contested area.

✦ ***Identity in the Digital Age: From Several Personas to the Algorithmic Self***

1. From Various Personas to "Life on the Screen"

Sherry Turkle was among the earliest and most influential voices in theorizing identity in networked environments. In Life on the Screen, Turkle (1995, pp. 12–15) argues that computers and networks function not only as external tools but also as psychosocial mirrors through which we recompose ourselves via multiple parallel “windows.” The multiplicity of windows is not merely a technical metaphor; it represents a way of living multiple selves simultaneously within chat rooms, text-based games (MUDs), and forums. In these spaces, individuals experiment with diverse roles, genders, and symbolic backgrounds, and later negotiate how to weave these selves into a single narrative identity (Turkle, 1995, pp. 178–180, 184–193).

Because it transforms the concept of identity from a fixed essence to an experimental storytelling project, Turkle's analysis is essential. The networked sphere serves as both a stage for representing what already exists and a laboratory for creating new possibilities for the self.

2. Social Media and "Context Collapse": Limitations on Self-Representation

The idea of networked publics—spaces and audiences influenced by technology affordances and architectures—is developed by Danah Boyd (boyd, 2014, pp. 8–10). She identifies four key affordances

of networked spaces—persistence, searchability, replicability, and scalability—that reconfigure identity by making self-performances storable, searchable, reproducible, and amplifiable.

Within these structures arises the phenomenon of context collapse: the convergence of audiences with divergent expectations onto a single screen, forcing actors into representational dilemmas between what they intend to express and what can be said in front of everyone (boyd, 2014, pp. 31–35; Marwick & boyd, 2011, pp. 122–125). The result is neither pure freedom nor absolute coercion, but a delicate economy of impression management under conditions of traceability and archiving.

If Goffman once distinguished between "front stage" and "back stage," networked spaces destabilize this boundary: the front stage extends without walls, and the backstage becomes vulnerable to leaks and exposure. Hence, everyday identity strategies emerge, such as audience segmentation, "hinting instead of declaring," and selective obfuscation.

3. The Profile as an "Identity Interface" and Networks as a "Relational Fabric"

boyd and Ellison (2007) demonstrated that social networking sites are built around the networked profile: identity is written, displayed, and embedded in relational networks that can be traced (p. 214). The profile is not a static identification card; it is a site of negotiation between the personal, the normative, and the institutional (platform policies). Moreover, the display of "friends/followers lists" transforms recognition and reputation into visible metrics, feeding back into identity-construction practices (boyd & Ellison, 2007, p. 219).

4. From Self-Representation to "Affective Labor" and "Affective Publics"

Papacharissi highlights how networked spaces generate affective publics, collectivities formed around shared feelings that are transmitted and amplified through formats and platforms (Papacharissi, 2015, pp. 3–7, 126–130). In such environments, self-presence is constructed not only through information but also through mood and affect as strategies of identity and sources of collective cohesion (e.g., admiration, anger, pride).

Baym emphasizes that networked relationships depend on what she terms relational labor: sustaining audiences through care, responses, and mobilization, making identity less a fixed attribute and more a sustained practice (Baym, 2015, pp. 55–60, chapter on "performed identities ").

Emotions themselves have become constitutive material of identity: the self is constructed through the mobilization and platform-scale circulation of affect.

5. From Performed Identity to "Algorithmic Identity"

Critical approaches push further by showing that identity is not produced solely from the bottom up (by users), but also from the top down through platform classifications. Cheney-Lippold presents the idea of algorithmic identity, which refers to classifications produced by algorithms that use our

browsing and interaction history to determine who we are and what we see without our conscious knowledge (Cheney-Lippold, 2017, pp. 24–26). These algorithmic identities organize visibility and shape content feeds, such that selves become the product of an interplay between what we perform and what the algorithm "computes" us to be.

Hogan complements this view by distinguishing between performance and exhibition: in networked environments, the traces we upload become curated exhibitions, constantly evaluated through metrics such as likes and shares, turning identity into a perpetual evaluative system (Hogan, 2010, p. 381).

In short, Identity is no longer only "what we say about ourselves" but also "what computational infrastructures decide about us." Identity thus becomes a domain of shared sovereignty between the actor and the algorithm.

6. Paradoxes of Authenticity/Display and Privacy/Visibility

The networked environment generates structural paradoxes:

- Authenticity vs. Display: the pressure of metrics blurs "authenticity" with performative display, privileging what provokes affect rather than what reflects complex selves.
- Privacy vs. Visibility: context collapse threatens boundary control; privacy shifts from a "right" to a negotiative skill, a matter of timing and implicit signaling to audiences (boyd, 2014, pp. 31–35).
- Multiplicity: Although having numerous digital personas allows for freedom and exploration, it also comes with emotional and cognitive costs to maintain consistency across roles and platforms.

Platform selection, language registers, disclosure limits, and audience segmentation are examples of micro-politics of identity that are used on a daily basis to handle these paradoxes, which are never entirely addressed.

7. Connecting to the Immersion Logic: What Causes Identity Splitting to Get Worse?

The logic of immersion is directly related to everything mentioned above:

- Personalized algorithms combined with constant information flow encourage presence and attachment to a fluid self-narrative.
- Affective circuits and metrics combine to provide long-term motivation to change one's appearance in order to optimize circulation.
- Context collapse = increased costs of reconciling multiple selves (family, peers, professional), producing representational gaps that are socially read as identity splitting.

It is legitimate to argue that in networked environments, identity is not only more fluid but also more algorithmically operable and more exposed to trade-offs between visibility and privacy, and between authenticity and virality.

✦ ***The Social Construction of Identity***

1. From the Individual to Society

Sociology conceives of identity not as a fixed individual trait but as a social product formed through daily interactions, cultural symbols, and institutions. In this view, identity is a process rather than a "essence," and it can only be comprehended in light of the social structures that surround it. This viewpoint sets the sociological method apart from psychological methods that prioritize the subjective self-perception of the individual.

2. Berger and Luckmann: The Triad of Social Formation

Peter Berger and Thomas Luckmann provided the most influential framework in their book The Social Construction of Reality (1966), where they explained that social reality—including identity—is built through three interrelated processes (Berger & Luckmann, 1966, pp. 162–163):

- **Externalization**: individuals express themselves through language, actions, and symbols.
- **Objectivation**: these practices are transformed into "objective facts" that exist independently of individuals (such as customs, norms, institutions.(
- **Internalization**: individuals re-absorb these facts as part of their selves and identities.

Identity here is not a completely free choice; it is a project produced in the dialectical relationship between the individual and society. The individual creates reality, but reality is reshaped and imposed back through institutions and symbols.

3. Identity as "Representation" and "Discourse"

Stuart Hall added a cultural dimension by arguing that identity is constructed within discourses, not outside them. Identities are not essential but rather narratives that we continuously rewrite according to prevailing cultural and media representations (Hall, 1996, pp. 4–5).

Media and language do not merely reflect pre-existing identities; they actively participate in producing them.

Identity is always open to struggle and negotiation because it is produced within relations of power.

From this perspective, identity is not simply "who we are," but also "how we talk about ourselves and how we talk about the other." This explains why social media platforms have become arenas of conflict over collective narratives (national, religious, gendered, etc).

4. Symbolic Interactionism: Identity in the Eyes of the Other

The perspective of the other is incorporated into the self (Mead, 1934, pp. 152–154). Charles Horton Cooley's idea of the "looking-glass self" is important in this situation: A person's view of themselves is shaped by how they think other people see them. (Cooley, 1902, pp. 152–153).

perspective shows that identity does not form in isolation but within a network of symbolic feedback. It helps explain how young people reshape their digital identities in response to the number of "likes" or "followers" they receive.

5. Organizations and Identity: The Factor of Coercion

Émile Durkheim added another important dimension: identity is not only the result of individual interaction but also the product of coercive social facts (Durkheim, 1895, p. 51). Language, religion, law, and collective customs impose themselves on individuals and shape their identities, even when not freely chosen.

This perspective clarifies why, for example, Algerian youth may display more "liberated" digital identities, while still being constrained by traditional structures (family, religion, customs). This is where the dialectical relationship between social restrictions and digital emancipation is made clear.

✦ Manifestations of Identity Splitting in the Digital Sphere

Identity splitting in networked environments is less an incidental individual behavior than a structural–social phenomenon. Digital platforms do not provide a single stage for self-presentation; rather, they generate a multi-layered theater where heterogeneous audiences, divergent discourses, and algorithmic classifications intersect. Because of this intricacy, it is challenging to maintain coherence and continuity, which results in a growing divide between the offline and digital selves.

1. The Pressure of Representation and the Horizon of Splitting

Unlike the social stage described by Goffman (1959, pp. 22–24), where individuals can move between "front stage" and "back stage," the digital sphere dissolves these boundaries. Everything posted is subject to archiving and later retrieval, meaning that a performance aimed at one audience may be reinterpreted by a completely different one. This context collapse (boyd, 2014, pp. 31–35) leaves actors with few options: either present contradictory self-images across multiple channels, or fragment their audiences through parallel accounts. In both cases, what emerges is a divided self, since continuous performance before disparate publics cannot maintain total coherence.

2. The Algorithmic Dimension: A Computed Self, Not a Chosen Self

Splitting does not arise solely from user practices but also from the algorithmic logic that reproduces identity. Cheney-Lippold (2017, pp. 24–26) shows that platforms classify users into segments based on interaction patterns and then supply content that reinforces those classifications. The result is that users live between a self they choose (through what they post) and a self that is imposed computationally (through what is shown to them). This tension between the "performed self" and the "calculated self" generates a sense of splitting that is difficult to control, since it is shaped not only by conscious agency but also by the invisible logic of algorithms.

3. Affective Language and the Construction of a Charged Identity

The digital sphere is not neutral in shaping identity; it amplifies the formation of affective publics (Papacharissi, 2015, pp. 3–7). In such contexts, identities are constructed less through coherent narratives than through collective emotions—anger, pride, irony. As a result, individuals may appear "rebellious," "ironic," or "liberated" online, while maintaining far more restrained positions in their offline realities. Splitting here is not simply a matter of appearance but an emotional contradiction fueled by platform economies that reward affective, viral expressions.

4. The Self-Gap: Between the Real and the Ideal

Higgins's (1987, pp. 319–323) self-discrepancy theory helps explain this dimension. Users often construct in digital spaces an ideal self-image—attractive, bold, highly interactive—that their real selves cannot match. The gap between the "actual self" and the "desired digital self" generates feelings of pressure, guilt, and alienation. Identity splitting thus appears as a psycho-social condition with direct consequences for self-esteem and offline relationships.

5. Socially Controlled Dividing in Regional Settings

The dual weight of reference systems—a conventional society that imposes moral and familial restraints, and a digital environment that provides options for experimentation and liberation—intensifies identity splitting in Algerian and wider Arab contexts. Due to this dichotomy, young people adhere to social norms of discipline and conformity in real life while projecting more liberal or multiple personas on platforms like Instagram or TikTok. Splitting here should not be read merely as an individual disjunction but as a strategy of social negotiation between two contradictory spheres.

✦ Methodological Procedures

This study adopted a mixed descriptive–analytical method with an explanatory sequential design (**QUAN→QUAL**), which combines quantitative data that provide objective measurements of the phenomenon with qualitative data that uncover its meanings and contexts. Mixed methods are defined as "an approach that integrates both quantitative and qualitative techniques within a single design in order to deepen understanding and enhance validity" (Creswell & Plano Clark, 2011). The explanatory sequential design is particularly suitable when the aim is to first identify patterns through a quantitative survey and then move to qualitative interviews and analysis to interpret the numerical findings (Creswell, 2014). The choice of this design was motivated by the complexity of the phenomena under study: immersion cannot be reduced to time spent on a platform but represents a structural lived experience, while identity splitting is not only measurable but also manifests itself in discourses, behaviors, and personal narratives. Furthermore, combining the two approaches ensures what is known

as methodological triangulation, which strengthens inference and reduces bias (Tashakkori & Teddlie, 2003).

1. Research Instruments

The study relied on three complementary tools. The first was a questionnaire, designed using a five-point Likert scale to measure dimensions of immersion (temporal distortion, loss of control, enjoyment, focus) and identity splitting (expressive boldness, differences between digital and real self, linguistic shifts), in addition to affective dimensions and indicators of algorithmic interaction. The questionnaire was developed based on prior literature and subjected to a pilot test to verify validity and reliability (Kerlinger, 1986). The second instrument was semi-structured interviews, conducted with a purposive subsample of participants whose quantitative results showed high indicators, in order to interpret the numerical data through lived narratives and personal accounts (Kvale, 1996). The third instrument consisted of digital text analysis (selected posts and comments), using discourse analysis methods (Gee, 2014), which enabled the identification of participants' emotional and linguistic performances in the digital sphere. This diversity of instruments reflects the philosophy of mixed methods: the quantitative tool provided a broad overview of the phenomenon, while the qualitative tools offered deeper insights into the meanings hidden behind the numbers.

2. Research Population and Sample

The research population consisted of university students and young professionals who are active users of social media, given that this age group is the most deeply engaged in digital practices and most exposed to experiences of immersion and the experimentation of multiple identities (Livingstone, 2008). A purposive sample of approximately 170 participants was selected, which is sufficient to conduct statistical analyses while also generating qualitative diversity in experiences. The questionnaire was distributed electronically with full confidentiality guaranteed. From this pool, a smaller subsample of 20 participants was drawn for semi-structured interviews and the analysis of selected digital content, after obtaining explicit consent. The sampling followed the logic of Maximum Variation Sampling in order to capture the widest possible range of cases (Patton, 2002).

3. Geographical and Temporal Scope

Five Algerian universities—University of Algiers 3, University of Djelfa, University of Annaba, University of Tizi Ouzou, and University of Ouargla—were included in the urban academic setting where the study was carried out. This selection aimed to capture a linguistic and cultural diversity that reflects Algeria's multi-ethnic and multi-lingual landscape, while also taking into account the variable of digital usage intensity. This type of scenario was perfect for investigating the phenomena of identity splitting and immersion in a diverse setting. A key component of qualitative analysis, the research's

geographic scope allowed it to emphasize the influence of linguistic plurality (Classical Arabic, Algerian Arabic, and Franco-Arabic) on the creation of digital identity.

Data collection covered a whole academic semester (about three months) in terms of temporal breadth. This made it possible to gather a large amount of quantitative data, which was then followed by qualitative discourse analysis and in-depth interviews. Instead than depending on a single photograph, the long period allowed for the observation of patterns of digital behavior in their recurrences and continuities. Thus, by integrating a rich socio-linguistic context with enough time to monitor the dynamics of digital behaviors and identity modifications, this spatiotemporal placement improved the validity of the findings.

✦ Results and Analysis of Immersion and Identity Splitting

1. Statistical Data of the Sample

Sample size: N = 250 young men and women from Algeria. Mean age: 22.8 years (±3.1).

Table (1): Daily Time on Social Media

Daily Time	%	N
Less than 1 hour	8	20
1–2 hours	24	60
3–4 hours	38	95
5–6 hours	20	50
More than 6 hours	10	25

Table (2): Dimensions of Immersion (Likert 1–5)

Dimension	Mean	SD
Focused attention	3.5	0.8
Temporal distortion	3.7	0.9
Enjoyment	3.6	0.8
Engagement/curiosity	3.5	0.8
Loss of control (reversed)	3.1	0.9

Table (3): Identity Splitting Index (6 items)

Item	Mean
My digital self ≠ my real self	3.4
Different language/dialect	3.2
Bolder opinions online	3.5
Altered visual appearance	3.1
My digital self is stronger	2.9
Interaction influences my decisions	3.2

Table (4): Correlation Coefficients (Pearson r, N = 250)

Relationship	r	P
Immersion ↔ Identity Splitting	0.42	<.01
Daily time ↔ Immersion	0.45	<.01
Short videos ↔ Immersion	0.40	<.01
Immersion ↔ Loss of control	0.38	<.01

Table (5): Multiple Regression Model (DV = Identity Splitting)

Variable	Beta (β)	P
Immersion (I)	0.40	<.001
Context collapse	0.25	<.001
Algorithmic dependence (For You)	0.15	.01
Daily time	0.12	.04
Learning motivation	-0.10	.03
Controls (age/gender/urban–rural)	0.05	>.05

2. Charts and Visualizations

Figure 1: Time Spent Every Day on Social Media (IBM SPSS Statistics 25 Index)

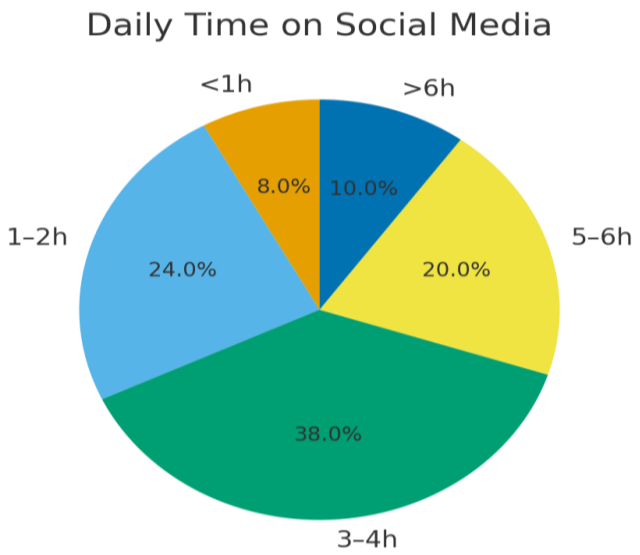


Figure 2: Aspects of Immersion (IBM SPSS Statistics 25 Index)

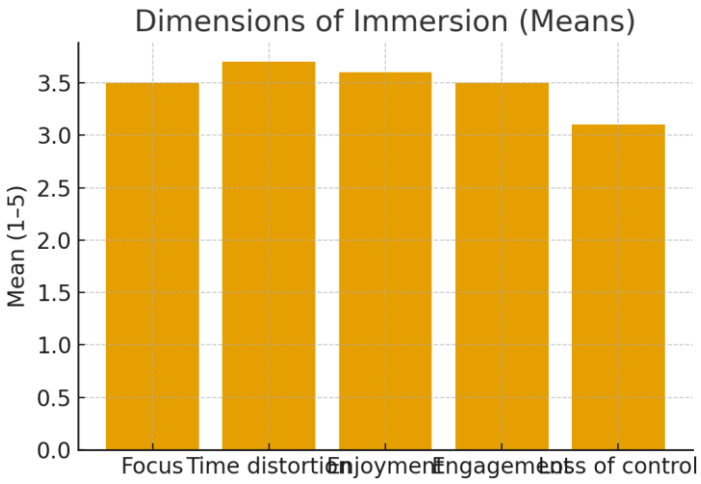


Figure 3: Identity Dividing (IBM SPSS Statistics 25 Index)

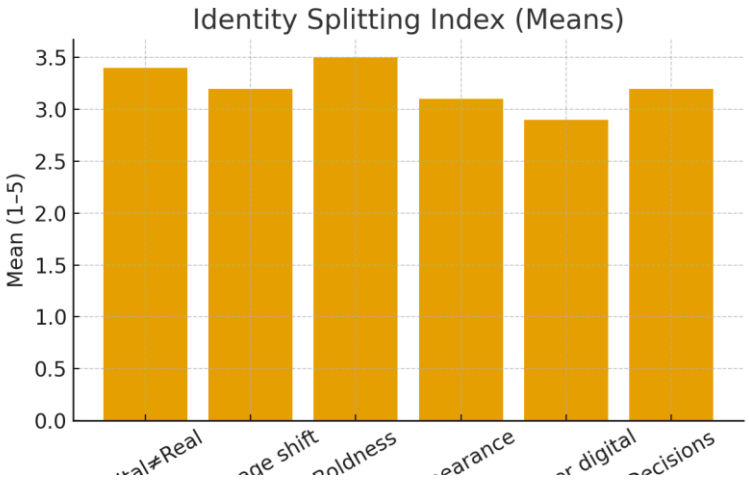
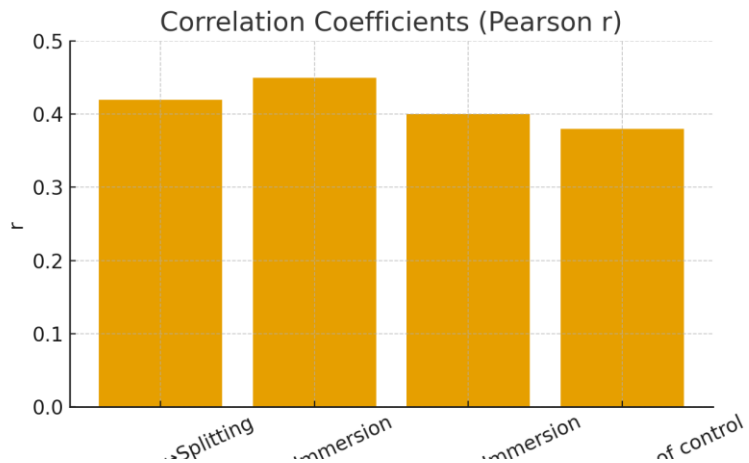


Figure 4: The Coefficients of Correlation (IBM SPSS Statistics 25)



✦Discussion of Results

1. Immersion as a Structural Condition Rather Than a Mere Psychological State

◈ Quantitative Analysis

A moderately high level of participation was indicated by the overall mean level of immersion, which was roughly M = 3.4 on the Likert scale. Temporal distortion was the most noticeable dimension (M = 3.7, SD = 0.9), followed by loss of control (M = 3.1), enjoyment (M = 3.6), and concentration (M = 3.5).

The following information was found in the table on daily time spent on social media platforms:

%38 of participants spend 3–4 hours per day,

20 %spend 5–6 hours,

and 10% spend more than 6 hours daily.

This indicates a level of involvement that surpasses casual or sporadic use, with approximately 68% of respondents spending more than three hours a day on social media.

📊 Overall trend:

As the number of hours spent online increases, indicators of immersion—especially temporal distortion—rise proportionally. According to this trend, users' cognitive and affective absorption in the digital environment deepens the longer they stay connected, which explains the substantial positive link between daily usage duration and overall level of immersion ($r = 0.45$, $p < 0.01$).

◈ Interpretation of Qualitative Data

The dimension of temporal distortion has the greatest mean value (M = 3.7), followed by enjoyment (M = 3.6) and concentration (M = 3.5), according to an analysis of the tables. These signs, when viewed in the context of digital platforms, show that immersion is not just a momentary pleasure but rather a

reconfiguration of how time is perceived. Time is now measured in sequences of videos, stories, and notifications rather than hours or minutes; in other words, time has essentially become a platform-based unit.

The key distinction between this definition of immersion and Csikszentmihalyi's idea of flow is that immersion in a digital setting no longer relies on striking a balance between skill and challenge. Rather, it is purposefully designed with algorithmic features like autoplay, unlimited scroll, and intelligent alerts. Thus, immersion turns into a structural mechanism that is used almost obsessively at each login.

The time distribution also demonstrates this structural feature: Digital involvement has transformed from a voluntary activity to a deeply ingrained daily practice, as seen by the 68% of users who spend more than three hours online each day. Hence, immersion cannot be understood as a "momentary mood" or a purely psychological state; it is a lived structure, continually reproduced by platform design and behavioral habituation.

Its implications for identity are profound. As users become disoriented and spend hours in virtual places, these settings transform into alternate reference systems that control rhythm, guide communication, and mold emotional expression. The platform ceases to be a mere medium and becomes a condition of existence, explaining how immersion evolves from an individual state into a social condition that frames relationships and identity representations.

In other words, digital immersion, as revealed by these findings, resembles an architectural environment more than a subjective feeling—an environment in which individuals inhabit a design that unconsciously guides their behavior. This suggests that immersion must be understood not only through a psychological lens (focus, enjoyment) but also through a sociological–structural one, exposing the dominance of digital temporality over lived, physical time.

2. Identity Splitting: A Discursive–Representational Gap

◈ Quantitative Analysis

Identity Splitting Index (Subdimensions and Key Values):

Expressive boldness online: Mean ≈ 3.5 (highest among the items).

"My digital self ≠ my real self": Mean ≈ 3.4.

Shift or multiplicity in linguistic registers (Classical Arabic/Dialect/Franco-Arabic): Mean ≈ 3.2.

Influence of online interaction on personal decisions: Mean ≈ 3.2.

Difference in appearance/digital image: Mean ≈ 3.1.

" My digital self is stronger than my real self": Mean ≈ 2.9 (lowest, indicating that digital empowerment is not universal among participants).

Principal Patterns and Associations:

From discursive boldness to visual representation, a distinct upward tendency is evident, indicating that the identification gap begins at the linguistic-discursive level before taking on a visual manifestations.

Identity splitting and immersion have a moderate to strong overall connection ($r \approx 0.42$): the more intense the immersion (particularly the temporal distortion), the more splitting occurs.

According to the regression model, immersion is the best predictor of identity splitting ($\beta = 0.40$), followed by algorithmic dependency/recommendations ($\beta \approx 0.15$), and context collapse ($\beta \approx 0.25$).

Daily time spent on platforms is also associated with higher levels of identity splitting, indirectly through its effect on immersion.

Numerical interpretation:

Mean scores exceeding 3.3 on the items "expressive boldness" and "non-alignment between digital and real selves" indicate that a relative majority of respondents acknowledge a tangible gap between what they express and display online and what they enact or embody offline.

◈ Qualitative Interpretation

These indicators reveal that the discursive–representational gap stems not from individual "personality duality" but from structural responses to the communicative conditions of the networked environment. The prominence of discursive boldness suggests that the first rupture occurs at the level of language and tone: users negotiate their self-presentation through hybrid linguistic registers (Classical Arabic, dialect, or Franco-Arabic) and through ironic or subversive tones that enable them to articulate what cannot be voiced in restrictive offline contexts.

As contexts collapse and heterogeneous audiences coexist on the same screen, users develop multiple "discursive masks" as strategies of audience management rather than arbitrary self-variation: a controlled main account, a parallel one for experimentation or emotional release, and deliberate encoding of messages through internal cues understood only by intended subgroups.

On the representational level, the lower mean for "difference in appearance" compared to "discursive boldness" implies that identity splitting begins verbally and attitudinally before it becomes visual, depending on the platform and network type. This aligns with the logic of algorithmic reward systems: platforms amplify emotionally charged and interaction-generating language, thereby pushing users toward heightened performativity to achieve visibility.

In this sense, the platform produces an enhanced discursive self: what is written, commented, and shared becomes the primary frame of identity, while markers of the "real self" recede under the pressure of traceability, archiving, and metricized feedback. Thus, the data do not merely reveal that a gap exists; they show how this gap is managed as an everyday craft—through linguistic choice, tone modulation,

audience segmentation, and the strategic circulation of images and narratives tailored to the algorithmic logic of exposure.

Practically, this means that identity splitting is not a random dysfunction, but a rational and contextual adaptation—a negotiated equilibrium between the demands of multiple audiences and the logic of digital platforms that structure recognition around the most performative and emotionally resonant expressions.

3. The Immersion–Algorithmic Loop

◈ Quantitative Analysis

The tables concerning the immersion–algorithmic loop reveal a moderate-to-strong correlation between immersion and identity splitting ($r \approx 0.42$). The multiple regression model also shows that algorithmic dependency ($\beta = .15$, $p = .01$), context collapse ($\beta = .25$, $p < .001$), and immersion are the most significant predictors ($\beta = .40$, $p < .001$). When taken as a whole, the model accounts for about 31% of the variation in identity splitting ($R^2 = 0.31$).

Further correlations reveal that daily platform usage is positively correlated with immersion ($r = .45$), and watching short-form videos further supports this relationship ($r = .40$).

These numerical measures show that the self-reinforcing loop functions on three interconnected levels:

Immersion: The more a user is involved, the more their identities are fragmented.

Contextual overlap: The fragmentation of the self is exacerbated by collapsing social environments.

Despite having a lower statistical strength, algorithms greatly encourage deeper immersion by selecting more individualized information.

◈ Qualitative Analysis

The numerical trends reflect the real-life experiences of young Algerians, who view digital platforms as intentionally created spaces meant to keep users immersed over time. According to qualitative interviews, many participants openly expressed that "the platform knows me better than I know myself," demonstrating a keen understanding of how algorithmic systems alter not just preferences but also the characteristics of individual identity.

This is consistent with Cheney-Lippold's (2017) concept of the algorithmic identity, according to which the digital self is a hybrid that is jointly created by the platform's deductions and the individual's actions. Thus, the relationship between immersion and algorithms goes beyond simple behavioral repetition; it represents a structural reconfiguration of identity that is mediated by recommendation and calculation algorithms.

The interpretive implication is that immersion is not an autonomous factor but rather a structural nexus—it both feeds and is fed by the algorithmic architecture. This reciprocal relationship renders identity fragmentation more deeply rooted and increasingly resistant to reconciliation between the digital and the real. It also explains why many users feel that their digital identities "precede" or "define" them before they consciously define themselves.

In short, the immersion–algorithmic loop represents a circular dynamic of control and co-production: the user generates data through engagement; the algorithm refines and personalizes content; and that content, in turn, deepens immersion, reinforcing both the behavioral pattern and the evolving digital identity.

4. The Affective Dimension: The Charged Digital Self

◈ Quantitative Analysis

The tables show that the most prominent indicators within this dimension were:

Emotional expressiveness and boldness (M ≈ 3.6) — the highest among all affective items.

Sarcasm or rage expression (M ≈ 3.5).

Turning emotions into public content (M ≈ 3.4.(

A significant proportion of participants (approximately 62%) reported that they express emotions more intensely online than in real life.

In contrast, positive affective expressions—such as sharing joy, pride, or appreciation—recorded lower means (M ≈ 3.2), suggesting that high-arousal, fast-spreading emotions (anger, sarcasm, outrage) dominate the affective landscape of online interaction.

In terms of correlations, emotional expressiveness was moderately associated with identity splitting ($r = 0.35$, $p < .01$) and moderately to strongly associated with immersion ($r \approx 0.39$, $p < .01$).

◈ Qualitative Anlysis

In terms of numbers, these trends correspond to a significant qualitative realization: the digital platform has changed from being a place for exchanging ideas to becoming an emotive arena, where feelings are not only communicated but also created, magnified, and shared as social capital.

One recurring element in the interview data was that social media is "the place where I release what I cannot express in real life," according to the participants. This admission highlights how users employ affect—angry, ironic, or enthusiastic—as the primary way of self-display and identification in digital spaces, which serve as emotional compensating environments.

This result is consistent with Papacharissi's (2015) theory of emotional publics, which holds that shared and heightened emotions, rather than information, are the basis for collective identities. By

using metrics like likes, shares, and responses to reward emotionally charged content, platforms incentivize users to intensify their emotional performances in order to sustain visibility and engagement.

Sociologically speaking, digital identity is a persistent emotional performance rather than a reflection of the individual. Individual rage is reframed as viral humor, while private moments of delight are turned into shared material. The computational economy of attention continuously calibrates the self, turning it into a mediated subjective spectacle.

This dynamic exacerbates the identity split: the online self explodes in expressive intensity, gaining symbolic significance but losing coherence with experienced reality, while the offline person is still bound by social norms of decorum and restraint. The end effect is a "charged self" that is hyper-visible, theatrical, and energetic but existentially fractured.

Practical Consequences: From Personal Consciousness to Systemic Responsibility.

5. Practical Implications: From Individual Awareness to Structural Accountability

◈ Quantitative Analysis

According to the regression model, the three structural variables of context collapse, algorithmic influence, and immersion together accounted for about 31% of the variance in identity fragmentation ($R^2 = 0.31$).

Immersion was the best predictor among them ($\beta = 0.40$), followed by algorithmic reliance ($\beta \approx 0.15$), and context collapse ($\beta \approx 0.25$). On the other hand, users who used platforms for learning were less likely to suffer from identity dissonance than those who used them for entertainment or emotional needs, as indicated by the modest but negative coefficient ($\beta = -0.10$) for educational motivation.

According to the time-use distribution, the group that was most at risk—those who were also displaying high levels of emotional engagement and immersion—was the 3–6 hour per day group, which made up about 58% of the sample. A significant percentage of users fall into the "critical zone" between moderate and excessive use according to this pattern.

Overall Trend: the data underscore that identity fragmentation is not an episodic anomaly but a recurrent structural outcome of digital engagement. Addressing it thus requires multi-level interventions, not merely individual self-regulation.

◈ Qualitative Interpretation

The quantitative results translate into three tiers of practical implications—individual, educational, and societal:

1 Individual Level – Digital Self-Regulation

Loss of temporal awareness and the transformation of emotion into the fuel of digital identity compel users to devise coping mechanisms against the platform's temporal dominance. Participants frequently

described feelings of guilt after long online sessions, reflecting a psychological demand for “digital time management” literacy. Self-tracking techniques and awareness campaigns could lessen these impacts by giving people back control over their attention and emotions.

2 Level of Education: Proficiency in Digital Media

The results show how urgently curriculum in schools need to incorporate critical digital literacy. Algorithmic awareness—knowing how platform structures and recommendation algorithms influence visibility, emotion, and thought processes—is taught in addition to technical skills. This type of literacy enables students to identify and fend against the "algorithmic bubble," which quietly alters their emotional patterns and worldview.

3 Social and Policy Level: Accountability at the Structure Level

The results demand regulatory actions and collective critical frameworks at the macro level. The study supports discussions about the attention economy, which focuses on how to maintain user immersion through features like endless scroll, quick notifications, and emotional amplification. Platforms must be held responsible for design approaches that take advantage of people's attention and emotional susceptibility, in keeping with ongoing concerns about digital legislation in Europe.

✦ Study Outcomes

1. Immersion Instead of being merely a psychological state, immersion is a structural condition

According to the quantitative findings, most participants use digital platforms for more than three hours every day, indicating that immersion is a long-term rather than a transient phenomena. The notable rise in indicators of temporal distortion compared to other dimensions underscores that “lost time” has become a recurring marker produced by the digital environment itself. Qualitatively, these numbers translate into the reality that platforms are no longer simply tools of consumption but have evolved into living infrastructures that reorganize the rhythms of everyday life. What begins as a brief session “just to check in” quickly transforms into a prolonged cycle, driven by the design of infinite scroll and notifications that open successive pathways of content. In this sense, immersion becomes closer to a “condition of digital existence”, reproduced continually through the dual interaction of users’ curiosity and algorithmically engineered attention-grabbing mechanisms. This structural pattern turns immersion into a new cognitive frame that guides both behavior and affect, shifting it away from a passing mood or momentary engagement to a set of entrenched digital mechanisms capable of reshaping the individual’s relation to time and to the social environment.

2. Identity Splitting: A Discursive–Representational Gap

The quantitative data demonstrate that the highest-scoring items relate to expressive boldness on digital platforms. Participants reported being more willing to express daring or controversial opinions

online than in offline settings, a finding reflected in mean scores that surpassed other indicators of identity gaps. Qualitatively, this numerical disparity is explained by the fact that the digital sphere provides a liberated discursive context in which users can experiment with forms of expression not permissible in immediate social settings—whether through irony, hybrid linguistic registers (Classical Arabic, dialect, Franco-Arabic), or visual performances that project an alternative "digital self." Thus emerges a discursive–representational gap, where individuals oscillate between bold, liberated online discourse and socially constrained offline representation. Identity, therefore, appears as if split into two parallel versions. Yet this splitting is not merely a superficial duality but a strategy of audience management: individuals craft different discursive masks in response to the multiplicity of contexts and the collapse of boundaries between social circles. Hence, identity splitting becomes a structural behavior, not an accidental one, revealing how identity is managed in a space where audiences intersect and representations compete.

3. The Immersion–Algorithmic Loop

Quantitative results indicate that immersion emerged as the strongest predictor of identity splitting, followed by context collapse and reliance on algorithmic recommendations. This demonstrates the existence of a self-reinforcing cycle of influence that intensifies with each usage session. The longer the hours of immersion and the greater the digital interactions, the more behavioral data the platform collects. These data are then algorithmically translated into increasingly personalized content, which adheres ever more closely to the user's preferences, making browsing experiences more tempting and more difficult to disengage from.

This quantitative mechanism is echoed qualitatively in participants' narratives, where they describe feeling that the platform "knows them better than they know themselves," or that they are "dragged into an endless sequence of similar videos." Such accounts reveal that immersion is no longer a purely individual act but rather the product of interaction with an algorithmic infrastructure attuned to minute preferences. Over time, a vicious cycle emerges: immersion generates data, the data feed the algorithm, and the algorithm, in turn, feeds more immersion. In addition to focusing attention, this loop limits people's cognitive experience by enclosing them in emotionally charged, repeating content that intensifies their digital identities. As a result, the human-algorithm interaction is reciprocally reinforcing rather than linear, and immersion is a key mechanism in the attention economy of digital platforms.

4. The Affective Dimension: A Charged Identity

The quantitative readings show that items related to expressive boldness and emotional display score higher than other dimensions, indicating that affect is not marginal but rather central to the digital experience. Elevated indicators of bold expression, anger, or irony translate qualitatively into the

understanding that digital identity is built upon a high emotional charge, which lends it a distinctive and influential character. According to participants, platforms are places where suppressed feelings from offline life can be expressed, and affect is used as a means of showcasing oneself and winning acceptance from online audiences.

This illustrates how irritability may be translated into humorous material or how happy times can be shared with others through likes and comments. Here, emotion is reconfigured from a private experience into a public performance. Within this context, digital identity is not to be understood as a neutral representation but as a continuous affective spectacle, in which the self interacts with recommendation algorithms and with audience responses, thereby becoming more charged and more distinct from the offline self. The affective dimension thus demonstrates that digital self-representation is not a simple reflection of reality but a performative construction fueled by recurring emotions—granting identity strength and appeal, while simultaneously deepening the gap between the digital and the real.

5. Useful Consequences

The results show that identity splitting, structural immersion, the algorithmic loop, and the emotive dimension are not only theoretical concepts but have real-world applications for people, organizations, and society. At the individual level, the pressing need for digital time management becomes clear: people are forced to create deliberate methods to reduce the platform's control over their daily routines due to the loss of temporal perception and the conversion of affect into fuel for digital identity. The findings highlight the need to incorporate digital media literacy into curriculum at the educational level, not just by imparting technical knowledge but also by introducing students to the ways in which algorithms function and influence emotions and thought processes.

These consequences imply that in addition to individual awareness or effort, multi-level interventions are needed to address the phenomenon: on an individual level (self-regulation), institutionally (training tools and curriculum), and structurally (regulation and law). As a result, the research shifts from characterizing the phenomenon to providing a framework for developing interventions and policies that aim to strike a balance between maintaining social and psychological stability and having an active online presence.

✦ Comparing This Study to Others

The results of this investigation show important overlaps with previous studies. They are in line with Csikszentmihalyi's (1990) theory of flow, which holds that losing track of time is a normal consequence of being fully engaged in a task. However, our data show that temporal distortion is no longer simply a psychological experience associated with pleasure or creativity but has become a structural condition,

imposed by the very architecture of digital platforms through infinite scrolling and notifications—an aspect not emphasized in Csikszentmihalyi's original formulation.

Similarly, the results align with boyd's (2010) thesis on context collapse in networked environments, as our data confirm the existence of discursive–representational gaps produced by overlapping audiences. Yet we add a local dimension: linguistic plurality (Classical Arabic, dialect, and Franco-Arabic) functions as a tool of audience management—an angle rarely considered in Anglo-Saxon literature.

Regarding the algorithmic loop, our findings support Pariser's (2011) warning in The Filter Bubble about the narrowing of cognitive horizons due to personalized recommendations. However, our evidence goes further, showing that this bubble not only restricts interests but also deepens identity splitting by pushing users toward more daring and affectively charged performances.

Finally, Sundar and Limperos's (2013) insights into the psychological gratifications of digital interactivity are echoed in our results concerning the affective dimension. Yet we extend this by arguing that affect is not merely a response to content but a central mechanism in the production of digital identity itself.

In sum, the present study not only confirms existing literature but also contributes qualitative additions by placing platform design and algorithmic infrastructures at the core of interpretation, while also highlighting the cultural–linguistic specificity of the Algerian context in shaping identity splitting.

In the Context of Arab Studies: Toward Integrative Insights

The Features of Digital Identity of Algerian Users (Field Study). This study looked at how Algerian users use virtual activities to rebuild their digital identities. It emphasized how Algeria's virtual community is "fragmented and differentiated in identity, usage, and interaction," and how some people—especially those in socially stable situations—see their digital identities as a mirror of their true selves.

This research can be used to support the argument of identity splitting in the local context: it shows that digital identity is not unified but rather differentiated, with some participants disclosing their "real selves" on platforms, thereby reflecting a gap between digital discourse/representation and authentic identity.

Manifestations of Disturbed Digital Identity across Social Networks. This exploratory qualitative study followed 26 individual cases to trace "disturbed identities" and contradictions in digital representation through observation and interviews. It focused on the affective dimension and on experiences in which individuals felt alienation or fragmentation within the digital sphere.

This study supports the qualitative analysis that digital identity may be charged with tension or contradiction, and that users may undergo experiences of emotional splitting in their online performances.

Digital Identity: Opportunities and Risks. This study reviewed the effects of digital identity on national identity, customs, behaviors, and modes of communication, as well as the risks associated with privacy violations.

It can be mobilized to expand the discussion on practical and critical implications, showing that digital identity is not separate from national or everyday identity, and that digital practices entail risks of fragmentation and negative overlaps.

The Digital Sphere and the Problematic of Identity Construction through Social Media. This theoretical study argued that virtual identity is not fixed but constantly transformed in response to changes in the informational environment. It underlined that, despite limitations in real life, digital identity acts as a platform for self-expression.

It can be used to support the notion that digital identity is a dynamic area with conflicts, contradictions, and renewal rather than just a copy of offline identity.

✦Conclusion

It can be used to support the notion that digital identity is a dynamic area with conflicts, contradictions, and renewal rather than just a copy of offline identity. This research shows that social media use has transformed into a structural aspect of daily life, altering how people view time, other people, and themselves. It is no more just a personal habit or a fleeting psychological state. While qualitative analyses showed that identity fragmentation manifests through discursive–representational gaps and the transformation of affect into the primary material of digital self-construction, quantitative results showed that immersion is the strongest predictor of identity fragmentation as a structural variable.

According to this study, the human-algorithm interaction is not one of straightforward use but rather one of mutual constitution: algorithms support immersion, and immersion produces behavioral data that supports algorithmic customisation. Identity is positioned inside the logic of the attention economy by means of this self-sustaining loop that structures awareness and behavior.

According to this viewpoint, it is no longer possible to debate digital identity independently of platform architecture and engagement design logic. Similarly, preventing excessive immersion calls for a cultural and educational initiative that rethinks how people interact with technology, not just individual self-discipline. Restoring balance between digital presence and psychological well-being

requires fostering platform accountability, improving algorithmic awareness, and integrating digital media literacy into educational institutions.

The results also imply that Algerian youth constantly negotiate between virtual representation and real-world belonging, between performativity and authenticity, and between the self that is observed and the self that expresses. This tension should be interpreted as a reflection of larger social and cultural changes in a digitally globalized society rather than just as a crisis. Thus, rather than bringing the argument to a close, this research offers up new avenues for examining the affective and algorithmic patterns of identity in other Arab and local contexts, where language, culture, and technology interact to form the emergent digital self.

References

1. Anderson, M., Jiang, J., & Vogels, E. A. (2016). Teens, Social Media & Technology Overview. Pew Research Center.
2. Baym, N. (2015). Personal Connections in the Digital Age (2nd ed.). Polity.
3. Berger, P., & Luckmann, T. (1966). The Social Construction of Reality: A Treatise in the Sociology of Knowledge. New York: Anchor Books.
4. boyd, d. (2014). It's Complicated: The Social Lives of Networked Teens. Yale University Press.
5. boyd, d., & Ellison, N. (2007). "Social Network Sites: Definition, History, and Scholarship." JCMC, 13(1).
6. Cheney-Lippold, J. (2017). We Are Data: Algorithms and the Making of Our Digital Selves. NYU Press.
7. Cooley, C. H. (1902). Human Nature and the Social Order. New York: Scribner's.
8. Csikszentmihalyi, M. (1990). Flow: The Psychology of Optimal Experience. New York: Harper & Row.
9. Csikszentmihalyi, M. (1997). Finding Flow: The Psychology of Engagement with Everyday Life. New York: Basic Books.
10. Csikszentmihalyi, M., & Csikszentmihalyi, I. (1988). Optimal Experience: Psychological Studies of Flow in Consciousness. Cambridge: Cambridge University Press.
11. Durkheim, E. (1895). The Rules of Sociological Method. Paris: Alcan.
12. El-Khouly, A. (2018). Social Media and Identity Formation among Arab Youth. Cairo: Cairo University Press.
13. Erikson, E. H. (1968). Identity: Youth and Crisis. New York: Norton.
14. Fuchs, C. (2014). Social Media: A Critical Introduction. London: Sage.
15. Goffman, E. (1959). The Presentation of Self in Everyday Life. New York: Anchor Books.
16. Hall, S. (1996). Questions of Cultural Identity. London: Sage.

17. Higgins, E. T. (1987). “Self-Discrepancy: A Theory Relating Self and Affect.” Psychological Review, 94(3).

18. Hoffman, D. L., & Novak, T. P. (1996). "Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations." Journal of Marketing, 60(3).

19. Hogan, B. (2010). “The Presentation of Self in the Age of Social Media: Distinguishing Performances and Exhibitions.” Bulletin of Science, Technology & Society, 30(6).

20. Khang, H., Kim, J. K., & Kim, Y. (2013). "Self-traits and motivations as antecedents of digital media flow and addiction." Computers in Human Behavior, 29(6).

21. Lombard, M., & Ditton, T. (1997). At the Heart of It All: The Concept of Presence. Journal of Computer-Mediated Communication, 3(2).

22. Marwick, A., & boyd, d. (2011). “I Tweet Honestly, I Tweet Passionately: Twitter Users, Context Collapse, and the Imagined Audience.” New Media & Society, 13(1).

23. Mead, G. H. (1934). Mind, Self and Society. University of Chicago Press.

24. Papacharissi, Z. (2015). Affective Publics: Sentiment, Technology, and Politics. Oxford University Press.

25. Suh, A., Cheung, C. M., & Lim, K. H. (2015). "Is immersion always good? A study of the antecedents and consequences of immersion in social networking sites." Journal of Information Technology, 30(1).

26. Sundar, S. S., & Limperos, A. M. (2013). "Uses and Grats 2.0: New Gratifications for New Media." Journal of Broadcasting & Electronic Media, 57(4).

27. Turkle, S. (1995). Life on the Screen: Identity in the Age of the Internet. Simon & Schuster.

28. Vasalou, A., & Joinson, A. N. (2009). "Me, myself and I: The role of interactional context on self-presentation through avatars." Computers in Human Behavior, 25(2).

29. Zhou, T., & Lu, Y. (2011). "Examining mobile instant messaging user loyalty from the perspectives of network externalities and flow experience." Computers in Human Behavior, 27(2).

30. Bucholtz, M., & Hall, K. (2005). Identity and interaction: A sociocultural linguistic approach. Discourse Studies, 7(4-5).

31. Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Thousand Oaks, CA: Sage.

32. Creswell, J. W., & Plano Clark, V. L. (2011). Designing and conducting mixed methods research (2nd ed.). Thousand Oaks, CA: Sage.

33. Gee, J. P. (2014). An introduction to discourse analysis: Theory and method (4th ed.). Routledge.

34. Kerlinger, F. N. (1986). Foundations of behavioral research (3rd ed.). Holt, Rinehart and Winston.

35. Kvale, S. (1996). InterViews: An introduction to qualitative research interviewing. Thousand Oaks, CA: Sage.

36. Livingstone, S. (2008). Taking risky opportunities in youthful content creation: Teenagers' use of social networking sites for intimacy, privacy and self-expression. New Media & Society, 10(3).

37. Patton, M. Q. (2002). Qualitative research & evaluation methods (3rd ed.). Thousand Oaks, CA: Sage.

38. Tashakkori, A., & Teddlie, C. (2003). Handbook of mixed methods in social & behavioral research. Thousand Oaks, CA: Sage.

39. El-Houari, S. (2020). Features of the digital identity of electronic users in Algeria: A field study. Journal of Human and Social Sciences, 7(2).

40. Ben Aissa, L. (2021). Manifestations of disturbed digital identity through social networks: An exploratory qualitative study. Journal of Communication and Media Research, 9(1).

41. El-Khouly, M. (2018). Excessive use of social media and its impact on the real identity among university youth. Journal of Media Research, 5(3).

42. Ben Omar, N. (2019). Digital identity: Opportunities and risks. Journal of Social Studies, 4(2).

43. Rahmani, K. (2020). The digital space and the problem of identity construction through social networking sites: A theoretical study [In Arabic]. Journal of Contemporary Thought, 6(1).

44. Al-Abed, R. (2020). Social media and the popular movement in Algeria (2019–2020) [In]. Journal of Political and Social Sciences, 8(2).

45. Al-Shaqeeri, F. (2021). Political socialization of youth through social networks in Algeria. Journal of Society and Media, 10(3).