



RESEARCH ARTICLE

Digital Citizenship and Responsible Social Media Behaviour Among Generation Z

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ABSTRACT

Generation Z participates in social media as an everyday environment for communication, learning, identity formation, consumption, and civic expression. This conceptual article examines how digital citizenship can strengthen responsible social media behaviour by integrating ethical participation, information judgement, respectful conduct, privacy agency, security awareness, and reflective identity management. The analysis synthesises contemporary and foundational scholarship to identify five pressures that weaken responsible behaviour: algorithmic attention capture, misinformation, cyberbullying and toxicity, privacy erosion, and commercially shaped identity performance. It then develops five explanatory mechanisms, namely algorithmic awareness, verification norms, empathy and accountability, privacy agency, and reflective management of influence, consumption, and identity. The article argues that responsible behaviour cannot be attributed solely to individual self-control because platform design, peer norms, institutional practices, and commercial incentives shape the conditions under which choices are made. Strategic pathways are proposed for embedding digital citizenship across curriculum and campus life, strengthening media verification, developing bystander capability, institutionalising privacy and security practice, and supporting reflective social media use. The contribution is an integrated capability perspective that links individual agency with institutional and technological responsibility for sustainable Generation Z participation in networked society.

Keywords: Citizenship, Responsibility, Literacy, Privacy, Generation

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1. INTRODUCTION

Generation Z now navigates adulthood within a communication landscape where social media functions as essential infrastructure for identity, relationships, information, consumption, learning, and civic expression. Its speed and reach broaden participation while simultaneously exposing young users to misinformation, harassment, commercial persuasion, privacy loss, and emotionally amplified interaction. Digital citizenship provides a structured basis for evaluating responsible participation in such environments, extending beyond access and technical skill toward rights, responsibilities, ethics, security, and constructive engagement (Ribble, 2015; Mossberger et al., 2008). A central concern is the tendency to equate frequent platform use with genuine competence, even though habitual use may coexist with weak verification, impulsive sharing, poor privacy practices, or limited awareness of algorithmic influence. Responsible social media behaviour should consequently be understood as a capability requiring deliberate development rather than an assumed characteristic of a digitally immersed generation. Al-Zahrani (2015) and Choi et al. (2017) show that digital citizenship is associated with attitudes, self-efficacy, participation, and multidimensional online practices. This establishes the need to examine Generation Z through a citizenship lens that connects individual behaviour with the social and technological conditions shaping digital participation.

Digital citizenship carries strategic importance because online actions increasingly generate consequences beyond digital spaces for education, employment, reputation, relationships, consumer decisions, and public discourse. A post, comment, repost, purchase, review, or disclosure can circulate beyond its original audience, become searchable, influence others, or contribute data to systems that personalise future content and commercial offers. Jones and Mitchell (2016) narrow youth digital citizenship around online respect and civic engagement, while Gu et al. (2023) show that university students construct digital citizenship through situated digital literacy practices in social media. These perspectives indicate that responsible behaviour involves both restraint and participation: avoiding harm is necessary, but so is the capacity to contribute constructively, evaluate information, communicate across difference, and exercise rights responsibly. The challenge for Generation Z is that these capabilities must operate under conditions designed for persistent engagement rather than reflective judgement. Evidence from Zaini et al. (2026) on Generation Z online spending and from Yusof et al. (2025) on digital mobility and learning behaviour illustrates how digital platforms now shape everyday choices beyond communication alone. Digital citizenship therefore provides an integrative way to connect ethics, literacy, security, participation, consumption, and identity within one account of responsible social media behaviour.

Contemporary scholarship increasingly treats digital citizenship as broader than internet safety guidance or technical proficiency. Systematic reviews show that effective digital citizenship education must cultivate critical participation and provide opportunities to practise judgement, rather than simply warning students about risk (Tadlaoui-Brahmi et al., 2022; Soria-Pérez et al., 2024). Gleason and von Gillern (2018) demonstrate how social media can become a site for participatory learning, while Guess et al. (2020) provide evidence that digital media literacy interventions can improve discernment between mainstream and false news. The research base therefore suggests that behaviour improves when users acquire both evaluative skills and social norms that make verification, respectful interaction, and accountable participation routine. However, responsible behaviour remains uneven because social media environments continually generate new formats,

incentives, and forms of influence faster than curricula and institutional policies are updated. Yusof and Abd Wahab (2021) emphasise the need to balance technological transformation with ethical considerations, and Yusof (2026) similarly positions digital leadership as requiring capability rather than adoption alone. The unresolved task is to translate these broad principles into mechanisms that explain why responsible behaviour succeeds or fails among Generation Z in contemporary platform environments.

Several unresolved conceptual tensions weaken prevailing approaches to responsible social media behaviour. First, interventions often focus on individual responsibility while giving insufficient attention to platform architecture, algorithmic recommendation, creator economies, social pressure, and commercial incentives that influence what users see and how they respond. Second, digital literacy programmes may teach information evaluation without addressing identity performance, emotional regulation, privacy negotiation, or bystander responsibility when harmful behaviour occurs. Third, digital citizenship is frequently treated as a school-age topic even though university students and young adults continue to encounter new risks, roles, and professional consequences as their digital lives expand. Research on privacy literacy shows that knowledge does not always translate directly into protective behaviour (Choi, 2023), while Zhong et al. (2022) demonstrate the continuing relevance of cyberbullying to ethical digital citizenship. Commercial participation adds another layer, as TikTok Shop and other social-commerce environments combine social influence with consumption and engagement (Yusof et al., 2025). A stronger framework must therefore explain the interaction among literacy, ethics, identity, privacy, social norms, commercial influence, and platform design rather than treating these as isolated problems.

This conceptual review develops an integrated explanation of digital citizenship and responsible social media behaviour among Generation Z, with particular attention to the mechanisms that convert digital familiarity into accountable participation. The analysis first establishes five foundations: ethical participation, information judgement, respectful civic conduct, privacy and rights, and identity formation. It then identifies five contemporary pressures that can weaken responsible behaviour, namely algorithmic attention capture, misinformation, online incivility, privacy erosion, and commercially shaped identity performance. The article interprets these pressures through mechanisms of algorithmic awareness, verification norms, empathy and accountability, privacy agency, and reflective identity management before developing institutional pathways for education and platform-facing practice. This direction is necessary because citizenship education is most effective when it links knowledge with active practice and social context (Jerome et al., 2024). The approach also recognises that digital participation can generate innovation and inclusion when people possess the capability to use technology responsibly, as reflected in research on technological learning and digital participation (Yusof et al., 2025). The intended contribution is a coherent framework that connects individual agency with institutional and technological responsibility in Generation Z social media use.

2.0 CORE DIGITAL CITIZENSHIP FOUNDATIONS SHAPING RESPONSIBLE PARTICIPATION

Responsible social media behaviour among Generation Z depends on interconnected capabilities rather than any single competence. Digital citizenship combines ethical participation, digital and media literacy, respect for others, awareness of rights and security, and the capacity to manage

identity across networked spaces. These foundations are mutually reinforcing. Information judgement supports responsible sharing; empathy shapes communication; privacy literacy protects personal agency; and reflective identity management reduces the pressure to perform for visibility. The following five subtopics establish this conceptual base and show why technical fluency is insufficient without ethical and civic capability. Together, they provide the analytical platform for examining the contemporary pressures that can distort responsible behaviour even among highly connected and experienced social media users.

2.1 Ethical Digital Citizenship Guiding Responsible Networked Participation

Ethical judgement, rather than technological access alone, provides the strongest basis for understanding digital citizenship. Ribble's framework connects communication, etiquette, law, rights, responsibilities, security, and well-being, while broader citizenship perspectives emphasise the capacity to participate meaningfully in society through digital channels. Choi et al., (2017) operationalise digital citizenship as a multidimensional construct, and Jones and Mitchell (2016) demonstrate that online respect and civic engagement provide measurable behavioural dimensions. The important implication is that a user can be technically competent yet still act as a weak digital citizen if behaviour is deceptive, harmful, exploitative, or indifferent to collective consequences. Ethical participation therefore involves evaluating not only whether an action is possible but whether it is fair, proportionate, transparent, and respectful of other users' rights. Yusof and Abd Wahab (2020) link ethical leadership with professional integrity, offering a transferable principle that technology-mediated participation also depends on norms and accountability rather than capability alone. For Generation Z, responsible social media behaviour should consequently be framed as a form of everyday citizenship in which ordinary digital choices contribute to the quality of shared online spaces. Ethical citizenship becomes credible when users can justify digital choices through fairness, accountability, respect, and awareness of consequences.

Ethical digital participation includes constructive contribution alongside restraint from harmful conduct. Citizenship implies agency, voice, and the willingness to participate in ways that support collective learning, dialogue, and social problem solving. Gleason and von Gillern (2018) show that social media can support participatory learning when students are guided to evaluate information, communicate constructively, and engage across perspectives, while Jerome et al., (2024) emphasise that active citizenship develops through meaningful participation rather than passive instruction. This creates an important distinction between compliance and citizenship: a compliant user may avoid prohibited behaviour, whereas a responsible digital citizen can also challenge misinformation, support targets of harassment, share useful information, and contribute respectfully to public discussion. The difficulty is that platforms often reward visibility and speed more directly than civic quality. Yusof et al., (2026) argue that ethical accountability is central to sustainable organisational development, and the same accountability logic applies to networked participation where users affect one another through repeated interaction. A mature conception of Generation Z digital citizenship must therefore include constructive agency alongside safety and restraint. Constructive citizenship therefore depends on active contribution that improves dialogue, supports others, and strengthens shared digital spaces.

2.2 Digital Literacy Strengthening Critical Information Judgement Practices

Digital literacy becomes meaningful citizenship capability when users can evaluate information rather than simply locate, create, or distribute it. Social media collapses publication, commentary, entertainment, advertising, and personal testimony into the same interface, requiring users to infer source quality, motive, evidence, and context quickly. Guess et al., (2020) demonstrate that even relatively brief digital media literacy interventions can improve discernment between mainstream and false news, while Pennycook and Rand (2019) show that analytic reasoning is associated with better discrimination between true and false content. The weakness of a purely technical definition of literacy is therefore clear: knowing how to search or share does not ensure that a user can recognise manipulated evidence, misleading framing, synthetic content, or emotionally engineered claims. Responsible behaviour requires a verification habit that interrupts the impulse to react before checking. Yusof (2025) links technology adoption with digital sustainability, reinforcing the broader principle that technological value depends on how capability is developed around adoption. For Generation Z, information judgement should be treated as a routine social responsibility because every share can amplify either reliable knowledge or avoidable confusion. Verification capability becomes socially valuable when careful judgement consistently precedes amplification, endorsement, or redistribution.

Sound information judgement additionally requires social and contextual literacy because credibility is increasingly signalled through peers, creators, popularity metrics, and personalised recommendation. A claim may appear trustworthy because it is repeated by familiar accounts or presented in a visually persuasive format, even when the underlying evidence remains weak. Gu et al. (2023) show that digital citizenship develops through situated digital literacy practices, indicating that evaluation is embedded in the communicative contexts where people actually read, view, and share content. Systematic reviews likewise warn that digital citizenship education can remain superficial when students are not asked to question the digital environments themselves (Tadlaoui-Brahmi et al., 2022). This means literacy education must extend from source checking to understanding how attention, identity, and platform cues influence credibility judgements. Research on digital mobility and learning behaviour illustrates that student decisions are increasingly shaped across connected digital contexts rather than within a single educational platform (Yusof et al., 2025). Responsible social media behaviour therefore requires users to examine both the content in front of them and the technological and social conditions that made that content appear credible. Critical literacy consequently requires attention to both message quality and the platform conditions influencing perceived credibility.

2.3 Online Empathy Supporting Respectful Civic Communication Practices

Respectful online conduct represents a central expression of digital citizenship because communication technologies reduce many of the social cues that normally moderate interpersonal behaviour. Comments, memes, reaction features, anonymous accounts, and rapid group participation can make humiliation or aggression feel distant from the person experiencing the harm. Jones and Mitchell (2016) found that online respect is negatively related to harassment perpetration and positively related to helpful bystander behaviour, demonstrating that civility has observable behavioural consequences. Zhong et al. (2022) further connect cyberbullying with the question of whether users act as ethical and responsible digital citizens. The central mechanism is empathy translated into restraint and accountability: users must be able to imagine consequences that are not

immediately visible on screen. A culture of responsibility also requires peer reinforcement, because harmful norms can spread when silence is interpreted as approval. The broader principle of human-centred design in professional settings similarly emphasises the importance of considering well-being alongside system efficiency (Abd Wahab & Yusof, 2020). For Generation Z, respectful social media behaviour is therefore both an individual ethical choice and a collective norm that influences whether digital spaces become supportive or hostile. Responsible interaction grows when empathy, restraint, and peer accountability become visible expectations within everyday online communication.

Civic conduct across social media requires more than politeness to the capacity to engage disagreement without dehumanising opponents or abandoning evidence. Generation Z increasingly encounters social, cultural, political, and consumer debates through short-form content where complex issues are compressed into emotionally charged frames. Gleason and von Gillern (2018) argue that social media can support constructive participation when learners practise evaluating and sharing information responsibly, while Fajri et al. (2022) identify digital citizenship as an important component of civic learning. The challenge is that disagreement can become performative, with users rewarded for sharpness, certainty, or public humiliation rather than listening and revision. Responsible conduct therefore requires communicative self-regulation: separating critique from personal attack, acknowledging uncertainty, and recognising when further engagement is unlikely to improve understanding. Kamarudin et al. (2025) show the value of hands-on learning among university students, supporting the proposition that citizenship skills should be practised through authentic interaction rather than taught only as abstract principles. Digital citizenship becomes more credible when respectful disagreement is experienced as a learned competence rather than an unrealistic expectation of permanent harmony. Practised civic judgement enables disagreement without humiliation while preserving evidence, dignity, and opportunities for meaningful revision.

2.4 Privacy Security Rights Strengthening Responsible Digital Agency

Privacy and security constitute citizenship concerns because meaningful participation requires the ability to control personal information, understand risk, and exercise rights without unnecessary exposure. Social media encourages disclosure through profiles, location features, images, social graphs, third-party applications, and personalised services, making privacy management a continuing negotiation rather than a single settings choice. Choi (2023) demonstrates that privacy literacy on social media has identifiable predictors and outcomes, confirming that knowledge and protective behaviour vary across users. Ribble (2015) similarly positions digital rights, responsibilities, and security as interrelated elements of citizenship. The tension is that convenience and social visibility often create incentives to disclose more than users would choose under slower reflection. Security competence therefore includes password practices, device protection, scam recognition, permission management, and awareness of how personal data can be combined across services. Yusof et al., (2025) examine security issues within smart technology integration, supporting the broader point that digital transformation creates benefits only when risk controls accompany adoption. For Generation Z, privacy agency should be framed as a right-enabled capability rather than a defensive burden placed solely on individuals. Sustainable privacy practice emerges when personal security skills are combined with informed choices about disclosure, access, and digital rights.

Digital rights further involve expectations that users can participate without manipulation, discrimination, unauthorised exploitation, or disproportionate surveillance. These rights are difficult to exercise when users do not understand platform terms, data flows, recommender systems, or the commercial value generated from their activity. Mossberger et al., (2008) connect digital citizenship with participation in society, which implies that access alone is insufficient if participation occurs under conditions users cannot meaningfully evaluate. Ethical governance therefore matters because rights depend on institutional practices as well as individual caution. Yusof et al., (2026) emphasise governance and ethical accountability as conditions for sustainable development, while Yusof and Abd Wahab (2021) argue for balancing technology with ethics during transformation. Applied to social media, these principles support clearer consent, age-appropriate design, transparent moderation, understandable privacy controls, and stronger accountability for harmful data practices. Generation Z users still need personal security skills, but responsibility should not be transferred entirely to them when risks are created by system design and commercial models. Responsible digital citizenship is therefore strongest when informed user agency is matched by credible institutional protection. Digital rights become meaningful when user knowledge is reinforced by transparent governance, accessible controls, and credible institutional protection.

2.5 Social Media Participation Shaping Reflective Digital Identity

Social media participation continually shapes identity through presentation, revision, comparison, and audience feedback on versions of themselves before real and imagined audiences. Generation Z often navigates overlapping roles as student, employee, consumer, friend, creator, activist, and community member, with each role leaving searchable traces that may travel across contexts. Gu et al., (2023) show that digital citizenship is dynamically constructed through social, educational, and communicative practices, indicating that identity and citizenship cannot be separated from everyday platform use. The opportunity is that social media can support self-expression, networking, learning, and community belonging; the risk is that constant visibility can encourage strategic performance, conformity, or oversharing. Responsible behaviour therefore includes understanding audience boundaries, permanence, context collapse, and the difference between authentic expression and disclosure driven mainly by social pressure. Research on digital participation among women entrepreneurs illustrates how networked participation can create opportunities when users possess the capability to engage effectively (Yusof et al., 2025). Digital citizenship should consequently help Generation Z build identities that are expressive and connected without surrendering judgement, privacy, or long-term reputation. Reflective identity management helps young users balance expression, connection, privacy, reputation, and changing audience expectations.

Identity formation increasingly intersects with commercial influence because creator culture, influencer marketing, social commerce, and platform metrics connect self-presentation with consumption and monetisation. Likes, followers, affiliate links, reviews, and algorithmic visibility can make social approval and economic value appear to be the same signal. Zaini et al., (2026) examine how consumer review perception influences Generation Z online spending, while Yusof, Fauzi, Jamaludin, et al., (2025) analyse automated retail technologies and changing consumer behaviour. These studies illustrate a broader digital environment in which users do not merely communicate but constantly encounter persuasive signals that shape preference, trust, and spending. Responsible identity management therefore includes recognising sponsored influence, comparing claims, resisting impulsive consumption, and distinguishing social belonging from purchase

behaviour. The difficulty is that commercial messages are often embedded in entertainment and peer-style communication rather than clearly separated advertising. A digital citizenship perspective makes this commercially mediated identity visible as an ethical and literacy issue rather than treating consumption as unrelated to citizenship. For Generation Z, reflective participation requires awareness of how platforms convert attention, identity, and social relationships into economic value. Commercially aware citizenship requires users to distinguish authentic preference from persuasive signals embedded within social interaction.

3.0 CONTEMPORARY DIGITAL PRESSURES WEAKENING RESPONSIBLE SOCIAL MEDIA BEHAVIOUR

Generation Z uses social media within systems that actively organise attention, visibility, interaction, and consumption. Responsible behaviour can therefore be weakened even when users understand basic digital rules. Algorithmic amplification rewards emotionally engaging content, misinformation exploits rapid sharing, cyberbullying can be normalised through peer dynamics, privacy is complicated by data-intensive platforms, and commercial influence blurs the boundary between expression and persuasion. These pressures are not independent. They reinforce one another by increasing speed, reducing reflection, and converting social approval into a measurable platform signal.

3.1 Algorithmic Amplification Intensifying Platform Attention Capture Dynamics

Algorithmic recommendation places substantial pressure on responsible behaviour because it determines which content receives repeated exposure and which reactions are most likely to be rewarded with visibility. Users may experience a personalised feed as a neutral reflection of preference even though ranking systems continuously learn from clicks, watch time, shares, and social interaction. The result is an environment where emotionally intense, novel, or polarising content can outperform slower and more qualified information. Digital citizenship becomes difficult when users are unaware that attention itself is being optimised and converted into platform value. Ribble's behavioural framework remains useful, but contemporary citizenship also requires understanding the infrastructures that shape opportunities for behaviour (Ribble, 2015). Yusof (2026) highlights the strategic importance of digital leadership, while Yusof, Ahmad Zaini, et al., (2025) show how artificial intelligence and automation increasingly reorganise operational decision environments. The relevant lesson is that algorithmic systems are not passive tools; they structure choices and incentives. Generation Z therefore needs enough platform literacy to recognise when recommendation is narrowing exposure, accelerating reaction, or encouraging continued engagement beyond deliberate intention. Algorithmic literacy can restore deliberate choice by helping users recognise how ranking systems shape visibility, repetition, and engagement incentives.

Attention capture becomes particularly consequential when social validation is attached to platform metrics that are visible in real time. Notifications, streaks, views, reactions, and follower counts can convert social participation into continuous performance monitoring, encouraging users to post, react, or remain connected even when the activity no longer serves a meaningful purpose. Odgers and Jensen (2020) caution against simplistic claims about digital technology and adolescent mental health, but their review also demonstrates the importance of examining how specific patterns of use relate to well-being rather than treating screen time as a single phenomenon. The citizenship challenge is therefore not simply excessive use; it is the erosion of reflective control when design

features repeatedly interrupt attention and reward impulsive participation. Human-centred approaches remind institutions to evaluate whether technology supports well-being rather than only efficiency or engagement (Abd Wahab & Yusof, 2020). Responsible behaviour requires users to recognise attention as a limited resource and to create boundaries that protect deliberation, study, sleep, relationships, and emotional regulation. Without that capability, technical fluency can coexist with reduced autonomy over when and why social media is used. Attention management therefore supports autonomy by protecting time, concentration, emotional regulation, and purposeful platform use.

3.2 Misinformation Exposure Weakening Critical Verification Habits Online

Misinformation undermines digital citizenship because social media enables claims to travel through trusted networks before users have verified their origin, evidence, or context. Visual credibility, repetition, emotional resonance, and endorsement by familiar accounts can substitute for substantive evaluation, particularly when users encounter information while distracted or emotionally activated. Pennycook and Rand (2019) show that analytic thinking is associated with better discernment, while Guess et al., (2020) demonstrate that digital media literacy interventions can improve the ability to distinguish false from mainstream news. The problem is therefore partly behavioural: users often possess enough knowledge to verify but do not activate that knowledge before sharing. Responsible citizenship requires a pause between exposure and amplification, especially where content concerns health, safety, public affairs, reputations, or vulnerable groups. Yusof and Razali (2020) emphasise the importance of risk perception and managerial judgement under uncertainty, a principle that also applies to digital information decisions where evidence is incomplete. Generation Z needs verification habits that are fast enough for everyday use but strong enough to resist the speed and social pressure built into platform interaction. Verification becomes dependable when checking occurs before sharing, especially when claims involve public safety, reputation, or vulnerable communities.

Weak verification habits can also develop because the social cost of checking can feel higher than the immediate reward of sharing content that confirms group identity or attracts engagement. Fact-checking requires time, uncertainty tolerance, and willingness to discover that a preferred claim is inaccurate, whereas reposting can deliver instant social recognition. Jones and Mitchell (2016) connect digital citizenship with respectful and civic behaviour, implying that information accuracy is also a relational responsibility because false claims can harm other users and degrade public discussion. Systematic reviews of digital citizenship education suggest that critical engagement is often underdeveloped when learning focuses on tool operation rather than questioning digital environments and information practices (Tadlaoui-Brahmi et al., 2022). The wider consequence is cumulative: repeated low-quality sharing normalises a culture where confidence is valued more than evidence. Technology adoption research also shows that digital capability must accompany implementation if technology is to generate sustainable value (Yusof, 2025). For Generation Z, responsible social media behaviour therefore requires social norms that make checking credible rather than awkward and correction a sign of integrity rather than weakness. A healthy information culture rewards evidence, correction, and uncertainty rather than speed, confidence, or group approval.

3.3 Cyberbullying Toxicity Normalising Harmful Digital Communication Practices

Cyberbullying and online toxicity weaken digital citizenship by turning communication affordances into mechanisms for humiliation, exclusion, harassment, or coordinated attack. The persistence and replicability of digital content can intensify harm because a hostile message can be captured, redistributed, and revisited beyond the original interaction. Zhong et al., (2022) analyse cyberbullying as a direct challenge to ethical and responsible digital citizenship, while Jones and Mitchell (2016) show that online respect is related to lower harassment perpetration and stronger helpful bystander behaviour. The problem is intensified when harmful humour, pile-ons, or aggressive language become normalised within peer groups, reducing the likelihood that users recognise the seriousness of what they are doing. Responsible behaviour requires empathy, boundary recognition, and an understanding that visibility magnifies responsibility rather than reducing it. Ethical leadership research similarly shows that norms are strengthened when conduct is modelled and reinforced consistently (Yusof & Abd Wahab, 2020). Generation Z social media environments therefore need cultures in which civility, intervention, and repair are more socially legitimate than spectatorship or participation in collective humiliation. Responsible communities reduce cyberbullying when civility, intervention, documentation, and support become stronger norms than passive spectatorship.

Digital toxicity extends beyond direct bullying because repeated sarcasm, demeaning stereotypes, dogpiling, exclusion, and hostile disagreement can gradually redefine what users consider normal interaction. Platform distance can reduce immediate feedback about harm, while public metrics may reward responses that attract attention through conflict. Gleason and von Gillern (2018) demonstrate that social media can support constructive learning when participation is deliberately structured, suggesting that the same platforms can produce very different outcomes depending on norms and facilitation. Citizenship education must therefore address bystander behaviour, not only perpetrator and victim roles, because observers can reinforce or interrupt harmful dynamics. The practical challenge is to give users specific response options such as documenting abuse, reporting, offering private support, refusing amplification, and using proportionate public intervention when safe. Hands-on learning approaches are relevant because interpersonal judgement improves through practice, reflection, and feedback rather than abstract instruction alone (Kamarudin et al., 2025). Responsible Generation Z participation should consequently include the capability to recognise escalating harm and choose actions that protect dignity without intensifying conflict. Bystander competence matters because observers can either reinforce harmful dynamics or interrupt escalation through proportionate action.

3.4 Privacy Erosion Increasing Personal Data Vulnerability Risks

Privacy erosion represents a structural challenge because social media participation continuously produces data even when users are not deliberately disclosing sensitive information. Behavioural traces, location signals, device identifiers, social connections, purchases, viewing patterns, and inferred interests can be aggregated to create profiles that users may never see. Choi (2023) shows that privacy literacy varies and influences outcomes, while Ribble (2015) places security and rights within the core architecture of digital citizenship. The difficulty for Generation Z is that privacy decisions are often made through repeated micro-consents embedded in convenient interfaces rather than through one clear and informed choice. This creates a gap between perceived control and actual data exposure. Yusof, Abdul Razak, Jamaludin, et al., (2025) examine system maintenance and

security issues in smart technology environments, illustrating that digital value and vulnerability frequently increase together as systems become more connected. Responsible behaviour requires stronger personal practices, but individual action cannot fully compensate for opaque data collection or weak platform safeguards. Digital citizenship must therefore treat privacy as a shared responsibility involving user literacy, institutional accountability, and design choices that make protection understandable and practical. Privacy literacy becomes effective when users understand both visible disclosures and less obvious data generated through routine platform activity.

Data vulnerability can also shape reputation and future opportunities because social media content can be rediscovered in contexts far removed from the original audience or intention. Young users may post during periods of experimentation without anticipating later academic, employment, relationship, or professional consequences. The problem is not that every youthful mistake should produce permanent punishment; the problem is that digital memory is asymmetric, making content easier to preserve than context. Mossberger et al. (2008) frame digital citizenship around meaningful participation, which requires users to have enough control and knowledge to participate without disproportionate personal risk. Governance and ethical accountability are therefore important when institutions use social data to evaluate individuals (Yusof et al., 2026). Generation Z needs practical skills in audience management, archival review, account recovery, phishing resistance, and incident response, but also a clear understanding that privacy is dynamic rather than absolute. Responsible behaviour becomes more sustainable when users periodically reassess what they share, who can access it, and whether old content still reflects current identity and consent. Regular review of digital traces can help users protect reputation while adapting privacy choices to changing personal and professional roles.

3.5 Commercial Influence Shaping Performative Digital Identity Practices

Commercial influence complicates digital citizenship because social media increasingly blends interpersonal communication with advertising, affiliate marketing, sponsored content, social commerce, and algorithmically targeted persuasion. Generation Z users may encounter a product through a friend, creator, review, entertainment clip, or live stream without a clear boundary between recommendation and marketing. Zaini et al., (2026) show that consumer review perception is relevant to Generation Z online spending, while Yusof et al., (2025) identify both opportunities and challenges within TikTok Shop social commerce. The citizenship concern is not consumption itself but the quality of judgement under conditions where commercial incentives are embedded in social trust. Responsible behaviour requires recognising sponsorship, comparing claims, understanding scarcity tactics, and resisting the assumption that popularity signals product quality or personal worth. Digital platforms also transform consumer behaviour through increasingly automated forms of interaction (Yusof et al., 2025). Generation Z therefore needs commercial literacy as part of digital citizenship, especially where social approval, identity performance, and purchasing are tightly interconnected. Commercial literacy strengthens citizenship by helping users recognise sponsorship, persuasive design, scarcity cues, and socially embedded marketing.

Performative identity may intensify commercial pressure because visibility metrics encourage users to treat the self as a continuously optimised public profile. The pursuit of engagement may shape appearance, opinions, consumption, and even emotional disclosure, making it difficult to separate authentic expression from behaviour selected for algorithmic reward. Gu et al., (2023) demonstrate

that digital citizenship is constructed through varied communicative practices, showing that identity is not external to citizenship but one of the places where citizenship is enacted. The risk is that users learn to evaluate themselves through external metrics and comparison, increasing susceptibility to persuasive creators and narrowing acceptable forms of self-presentation. Odgers and Jensen (2020) caution against exaggerated conclusions about social media and mental health, yet their review supports attention to the specific contexts and patterns through which digital experiences affect well-being. Responsible citizenship therefore requires reflective distance from metrics and an ability to distinguish meaningful connection from platform-driven performance. For Generation Z, sustainable participation means retaining agency over identity rather than allowing commercial visibility systems to become the primary standard of social value. Reflective distance from popularity metrics helps preserve identity agency when platforms convert visibility into social and economic value.

4.0 RESPONSIBILITY MECHANISMS STRENGTHENING GENERATION Z DIGITAL PARTICIPATION

Generation Z digital challenges cannot be resolved through prohibition alone because they arise from interactions among user judgement, peer norms, platform features, and institutional support. A more useful approach is to identify mechanisms that make responsible behaviour more likely under real social media conditions. Algorithmic awareness can slow passive acceptance of recommended content; verification routines can interrupt misinformation; empathy and accountability can reshape responses to conflict; privacy agency can improve self-protection; and reflective identity management can reduce commercially driven performance pressures.

4.1 Platform Literacy Developing Critical Algorithmic Awareness Capabilities

Algorithmic awareness can transform routine platform familiarity into more deliberate digital citizenship. Users do not need to understand every technical detail of recommendation system, but they should recognise that feeds are selected, ranked, and personalised through data-driven processes rather than presented neutrally. Choi et al., (2017) show that digital citizenship includes active and critical dimensions, while Tadlaoui-Brahmi et al., (2022) argue that digital environments themselves should be questioned rather than treated as unquestionable tools. This awareness changes behaviour because it encourages users to interpret repeated exposure as a platform signal rather than proof that a claim is universally accepted or objectively important. It also supports practical actions such as diversifying sources, resetting recommendations, limiting notification triggers, and intentionally searching beyond the feed. Research on artificial intelligence and digital automation shows how algorithmic systems increasingly reorganise decision environments (Yusof al., 2025). For Generation Z, platform literacy should therefore progress from knowing how features work to understanding how those features influence attention, belief, and behaviour. Critical platform literacy encourages users to question recommendation patterns instead of interpreting repeated exposure as neutral evidence.

Algorithmic awareness becomes more effective when combined with attention management because knowing that a system is persuasive does not automatically prevent habitual engagement. Users need routines that create friction before impulsive reaction, such as disabling nonessential notifications, separating study and social accounts, scheduling periods without feeds, or pausing before reposting highly emotional content. Odgers and Jensen (2020) demonstrate why specific patterns of use matter more than simplistic assumptions that all digital exposure has the same effect. A citizenship

perspective adds that attention is not merely a personal productivity resource; it shapes the quality of information users encounter and the likelihood that they participate reflectively. Human-centred technology principles support evaluating systems in relation to user well-being and performance rather than only efficiency (Abd Wahab & Yusof, 2020), while Yusof, Kamarudin, Wahid, et al. (2025) show that digital transformation outcomes depend on how technological change is integrated into organisational capability. The strategic implication is to teach young users how to redesign their own digital environment instead of expecting willpower to compete continuously with optimised engagement systems. Responsible Generation Z participation becomes more achievable when platform use is organised around chosen purposes rather than continuous availability. Practical attention routines can create enough friction to support purposeful engagement rather than habitual reaction.

4.2 Verification Culture Strengthening Responsible Information Sharing Norms

Verification becomes more influential when communities treat it as a social norm rather than an academic skill reserved for assignments. Generation Z needs a small set of repeatable actions that can be used quickly in everyday platform contexts: identify the original source, inspect date and context, compare independent reporting, examine evidence, and delay sharing when uncertainty remains. Guess et al. (2020) show that scalable literacy interventions can improve news discernment, while Pennycook and Rand (2019) demonstrate the value of reflective reasoning in distinguishing false from real information. The mechanism works because a routine reduces the cognitive and social effort required to check. It also changes peer expectations when users begin asking for sources or correcting misinformation without framing correction as personal attack. Risk judgement research is relevant because online information decisions often occur under uncertainty and incomplete evidence (Yusof & Razali, 2020). Responsible digital citizenship therefore requires verification to become visible, ordinary, and socially rewarded, so that accuracy competes more effectively with speed and emotional appeal. Verification norms become sustainable when source checking and evidence-based correction are ordinary expectations within peer interaction.

A credible verification culture must also prepare users to correct mistakes after inaccurate content has already been shared. Digital responsibility is weakened when correction is treated as embarrassment, because users then have incentives to defend a false claim rather than update it. Jones and Mitchell (2016) connect digital citizenship with respectful participation, suggesting that correction should preserve dignity while protecting the information environment. Educational practice can normalise this by requiring students to document how their understanding changed, compare initial and revised claims, and explain why a source was unreliable. This turns error correction into evidence of learning rather than failure. Kamarudin et al. (2025) demonstrate the value of experiential learning for developing career-related capability, and the same principle supports practical media-literacy exercises where learners encounter realistic claims and must verify them under time constraints. For Generation Z, responsible behaviour improves when changing one's mind is recognised as a citizenship strength and when correcting the record becomes part of ordinary social media etiquette. Treating correction as intellectual integrity encourages users to revise claims openly rather than defend information already shown to be inaccurate.

4.3 Digital Empathy Strengthening Accountable Online Conduct Practices

Empathy strengthens responsible behaviour when moral awareness is converted into specific online actions. Users may understand that cyberbullying is harmful yet still laugh at, forward, or silently observe abusive content because responsibility feels distributed across the group. Zhong et al. (2022) demonstrate how linguistic practices can reveal cyberbullying dynamics, while Jones and Mitchell (2016) show that digital citizenship is associated with helpful bystander behaviour. The mechanism therefore involves converting moral concern into behavioural scripts: do not amplify humiliating content, document serious abuse, report through appropriate channels, support the target privately, and intervene publicly when safe and proportionate. Peer norms are crucial because visible nonparticipation can weaken the social reward of harmful behaviour. Ethical leadership and integrity research also shows that norms become credible when conduct is modelled consistently rather than announced abstractly (Yusof & Abd Wahab, 2020). For Generation Z, accountable social media conduct depends on having both the motivation and the practical repertoire to respond when digital interaction crosses from disagreement into harm. Accountable empathy becomes practical when users possess clear behavioural options for supporting targets, reporting harm, and limiting amplification.

Accountability additionally requires restorative capability because responsible citizenship includes repairing harm after poor judgement. Social media conflict often escalates because participants defend identity, recruit allies, or repost fragments of a dispute instead of acknowledging impact and reducing exposure. A more mature digital norm would distinguish between accountability and permanent public punishment, allowing proportionate apology, deletion, clarification, and changed behaviour where appropriate. Gleason and von Gillern (2018) show that social media can support learning through guided participation, and citizenship education research emphasises the value of active practice in developing civic outcomes (Jerome et al., 2024). Institutions can use case-based discussion and simulation to help learners judge when to apologise, when to report, when to disengage, and when a safety issue requires escalation. Yusof et al., (2026) place ethical accountability within sustainable organisational practice, reinforcing the wider principle that credible communities need processes for responsibility and repair. Generation Z digital citizenship becomes stronger when users can recognise harm, accept responsibility without performative defensiveness, and take concrete steps that reduce the likelihood of repetition. Restorative digital practice allows proportionate repair while maintaining clear boundaries around serious, persistent, or unsafe conduct.

4.4 Privacy Agency Strengthening Digital Self Protection Capabilities

Privacy agency transforms abstract awareness into informed, revisable choices about personal data. Instead of teaching privacy as a single instruction to share less, users need to understand audiences, permissions, location settings, data linkage, third-party access, account recovery, and the consequences of public versus restricted posting. Choi (2023) demonstrates that privacy literacy has measurable predictors and outcomes, showing why knowledge must be connected to behaviour. The mechanism is practical control: users who know where data are generated and how settings can be changed are better positioned to decide what level of exposure is appropriate for a specific purpose. Security must be integrated because privacy is easily undermined by compromised accounts, reused passwords, malicious links, or social engineering. Yusof, Abdul Razak, Jamaludin, et al., (2025) show that smart technology implementation brings system maintenance and security challenges,

illustrating the recurring relationship between connectivity and vulnerability. For Generation Z, digital self-protection should therefore be taught as an adaptable routine that is reviewed whenever platforms, devices, relationships, or professional roles change. Digital self-protection becomes adaptable when privacy routines are reviewed whenever platforms, devices, relationships, or responsibilities change.

Effective privacy agency also requires recognising that individual settings cannot resolve every data problem. Users may make careful choices while platforms continue to infer interests, relationships, or behavioural tendencies from metadata and interaction patterns. Mossberger et al., (2008) connect digital citizenship with meaningful participation, implying that people require a reasonable degree of agency over the conditions of digital participation. Ethical governance is therefore a complementary mechanism because institutions and platforms determine default settings, consent processes, retention periods, and access to redress. Yusof and Abd Wahab (2021) argue that technological transformation should remain balanced with ethical considerations, while Yusof et al., (2026) emphasise accountability in governance. These principles support privacy-by-design approaches, clearer language, proportionate data collection, and stronger user control. Generation Z should be educated to use available protections and to question practices that make participation conditional on unnecessary disclosure. Responsible digital citizenship is strongest when personal security competence and institutional accountability reinforce one another rather than being treated as substitutes. Shared privacy responsibility requires both informed users and institutions willing to improve defaults, consent, transparency, and redress.

4.5 Reflective Judgement Reshaping Influence Consumption Identity Practices

Reflective identity management can reduce pressures created by influencer culture, commercial persuasion, and visible popularity metrics. Users need to recognise when a social interaction also functions as marketing and when a purchase decision is being shaped by scarcity cues, creator trust, affiliate incentives, or group identity. Zaini et al., (2026) show the importance of review perception in Generation Z online spending, while Yusof et al., (2025) demonstrate how social commerce platforms create both engagement opportunities and strategic challenges. The key mechanism is separation: users should be able to distinguish personal preference from algorithmic repetition, social belonging from consumption, and authentic self-expression from content created primarily for metric performance. This does not require rejecting creators or online commerce; it requires more transparent judgement about why a message is persuasive. Research on digital participation and innovation also shows that online engagement can create genuine economic and social opportunity (Yusof et al., 2025). Responsible citizenship therefore aims to preserve the benefits of participation while reducing unreflective commercial influence over identity and spending. Reflective commercial judgement protects user agency without requiring withdrawal from creators, social commerce, or legitimate digital opportunities.

Reflective identity practice requires users to assess whether online behaviour remains consistent with long-term values across changing audiences and life stages. A post that generates immediate approval may create later conflict with academic, professional, family, or community roles, particularly when content is searchable and context collapses. Gu et al. (2023) show that digital citizenship is dynamically constructed across social and educational practices, which means identity must be managed as an evolving relationship rather than a fixed profile. The mechanism is reflective

continuity: users periodically review what they publish, how they present others, what communities they amplify, and whether their digital traces represent values they still endorse. Technological learning research reinforces the value of continuous capability development as digital environments change (Yusof et al., 2025). A reflective user can still experiment and participate creatively, but does so with greater awareness of audience, permanence, and consequences. For Generation Z, responsible social media behaviour therefore includes the capacity to revise digital practices as identity, responsibilities, and platform conditions evolve. Periodic review of digital identity supports continuity between current values, changing responsibilities, and long-term reputational goals.

5.0 CAPABILITY PATHWAYS STRENGTHENING SUSTAINABLE DIGITAL CITIZENSHIP PRACTICES

Sustainable digital citizenship depends on coordinated capability development rather than isolated awareness messages. Educational institutions, families, communities, and platform-facing policies can strengthen responsible behaviour by embedding citizenship across learning, making verification routine, teaching ethical participation and bystander action, improving privacy and security capability, and encouraging reflective social media use. These pathways are deliberately practical while remaining grounded in the mechanisms established earlier. Each pathway explains what should be developed, why it matters, how it can be implemented, and what longer-term value it can create for Generation Z. The aim is not to eliminate social media risk but to increase the capacity of young users to participate constructively, protect themselves and others, and make informed choices in changing digital environments.

5.1 Digital Citizenship Integration Strengthening Curriculum Campus Experiences

Educational institutions should integrate digital citizenship throughout curriculum and campus experiences rather than confining it to orientation sessions or technology courses. Responsible social media behaviour intersects with writing, research, professional ethics, marketing, communication, civic participation, data protection, and employability, so students need repeated opportunities to apply the same principles in different contexts. Systematic reviews indicate that citizenship education becomes stronger when learners practise participation and connect concepts with authentic activity (Jerome et al., 2024; Soria-Pérez et al., 2024). Implementation can include discipline-specific cases, social media simulations, digital reputation exercises, privacy audits, source-verification tasks, and structured reflection on platform design. The institution should also coordinate messages across academic policy, student affairs, counselling, career services, and IT support so that expectations are consistent. Kamarudin et al., (2025) provide evidence for hands-on learning among university students, supporting an experiential rather than purely declarative model. The expected outcome is a graduate who can transfer citizenship judgement across academic, social, consumer, and professional digital environments. Long-term value comes from treating responsible participation as part of educational quality rather than a peripheral compliance topic. Embedding citizenship across disciplines helps students transfer ethical judgement into academic, social, consumer, civic, and professional settings.

Curriculum integration should progress developmentally through increasing complexity as students move from basic safety toward contested ethical and civic decisions. Early learning can focus on account protection, respectful communication, and source checking; later learning can address algorithmic bias, digital rights, creator economies, professional reputation, data governance, and

public participation. Al-Zahrani (2015) shows that digital citizenship among higher education students is connected with attitudes, experience, and self-efficacy, suggesting that capability grows through sustained engagement rather than a single intervention. Institutions should therefore assess progression using scenarios and reflective tasks rather than only multiple-choice knowledge tests. The same developmental logic is visible in digital leadership research, where capability determines whether technology adoption produces strategic value (Yusof, 2026). Students should also participate in designing campus digital norms because co-creation increases relevance and exposes educators to emerging platform practices. A mature programme would connect course learning with student organisations, peer mentoring, digital campaigns, and career preparation. This makes digital citizenship visible as a continuing educational outcome that develops with changing responsibilities. Developmental assessment should therefore examine applied judgement through scenarios, reflection, and progressively complex digital decisions.

5.2 Verification Routines Strengthening Critical Media Literacy Practices

Institutions should establish practical verification and media-literacy routines that students can use under realistic social media conditions. The most useful routines are short enough to survive everyday use but rigorous enough to interrupt impulsive amplification: identify the source, inspect evidence, check context, compare independent coverage, and withhold sharing when uncertainty remains. Guess et al. (2020) show that scalable literacy interventions can improve discernment, while Pennycook and Rand (2019) demonstrate the role of reflective reasoning in resisting false content. Implementation should use current examples from multiple domains, including news, health claims, consumer reviews, edited images, short-form video, and AI-generated material. Assessment can reward the quality of verification process rather than only whether students happen to reach the correct answer. Digital sustainability research suggests that technology adoption is more valuable when capability accompanies use (Yusof, 2025). The expected outcome is a verification habit that becomes socially portable beyond formal study. Long-term value arises when students treat accuracy as part of their responsibility to other users rather than a private academic skill. Practical verification routines become durable when students can apply them quickly across news, health, consumer, visual, and synthetic content.

Media literacy should incorporate correction practices and uncertainty management because responsible users will inevitably make mistakes. Students need to practise how to retract a false claim, update a post, explain revised evidence, and distinguish between honest uncertainty and unsupported certainty. Jones and Mitchell (2016) position respectful participation as central to digital citizenship, which supports correction practices that protect truth without humiliating others. Educators can model this by making source evaluation visible, showing how experts revise conclusions, and rewarding transparent acknowledgement of error. Gu et al. (2023) demonstrate that digital citizenship emerges through situated literacy practice, so correction should be rehearsed within realistic social communication rather than treated only as an academic citation problem. Peer activities can require students to challenge a claim respectfully and respond to challenge without defensiveness. The expected outcome is a culture in which verification and revision are socially legitimate behaviours. This matters strategically because misinformation is more difficult to reduce when users perceive correction as a threat to identity or status. Normalising revision helps create information cultures where transparent correction signals learning, responsibility, and intellectual maturity.

5.3 Ethical Participation Strengthening Active Bystander Response Capabilities

Educational institutions should strengthen ethical participation and active bystander capability by giving Generation Z concrete strategies for responding to harmful online behaviour. Students need to distinguish disagreement from harassment, recognise escalating group dynamics, document serious incidents, use reporting channels, support targets, and know when public intervention may increase risk. Zhong et al., (2022) demonstrate the relevance of cyberbullying to ethical digital citizenship, while Jones and Mitchell (2016) link digital citizenship with helpful bystander behaviour. Implementation should use case discussions, role play, moderation exercises, and reflection on real platform features rather than generic instructions to be respectful. Clear institutional procedures are also necessary so that students know where to seek help when online harm affects learning or safety. Ethical accountability research reinforces the importance of credible norms and consistent response (Yusof et al., 2026). The expected outcome is a community in which users are more capable of interrupting harm and less likely to reinforce it through silence or amplification. Long-term value lies in normalising responsibility for the social environment rather than treating harmful behaviour as a private conflict between isolated individuals. Active bystander education should give students realistic strategies for recognising escalation, supporting targets, documenting incidents, and seeking help.

Bystander capability should be reinforced through restorative skills because some online conflicts can be reduced through proportionate acknowledgement, apology, clarification, and changed behaviour. Institutions need to avoid two extremes: trivialising serious harm and treating every mistake as permanently disqualifying. Citizenship education research supports active learning that develops judgement across real social situations (Jerome et al., 2024), while Gleason and von Gillern (2018) show that social media can support constructive participation when interaction is deliberately structured. Students can practise identifying which cases require private repair, public correction, formal reporting, or disengagement. This strengthens ethical reasoning because the response becomes proportionate to the nature and persistence of harm. Yusof and Abd Wahab (2020) emphasise professional integrity, a principle that translates into taking responsibility when one's conduct affects others. The expected outcome is not conflict-free social media but a stronger capacity to prevent escalation and restore trust where possible. For Generation Z, digital citizenship becomes sustainable when communities possess both protective mechanisms and credible pathways for learning from error. Restorative judgement strengthens digital communities by matching responses to severity while preserving opportunities for responsible learning where appropriate.

5.4 Privacy Security Governance Strengthening Platform Accountability Practices

Institutions should embed privacy and security capability by making protective practice part of routine student experience rather than optional technical advice. Students should learn account recovery, multifactor authentication, phishing recognition, permission review, secure device practice, location management, and periodic checks of public digital traces. Choi (2023) shows that privacy literacy has meaningful behavioural outcomes, while Ribble (2015) treats digital security and rights as core citizenship elements. Implementation can include annual privacy check-ups, simulated scam exercises, security prompts linked to campus systems, and easy access to incident support. The programme should explain not only how to change settings but why particular data matter and how different forms of exposure can combine. Smart technology research demonstrates that connected systems create maintenance and security challenges alongside operational benefits

(Yusof et al., 2025). The expected outcome is stronger privacy agency and faster response when incidents occur. Long-term value arises when security becomes a normal part of responsible participation rather than a specialised concern addressed only after harm has happened. Routine privacy education can improve prevention, incident response, account recovery, and informed management of personal digital exposure.

Platform accountability must complement user education because responsible behaviour is difficult to sustain when interfaces, defaults, or commercial practices repeatedly undermine informed choice. Educational institutions can teach students to evaluate privacy policies, moderation systems, recommendation settings, sponsorship disclosure, and data permissions as part of digital citizenship. Mossberger et al., (2008) connect citizenship with meaningful digital participation, while Yusof and Abd Wahab (2021) emphasise the need to balance technological transformation with ethics. Institutions can also adopt procurement standards that favour privacy, accessibility, transparency, and appropriate data minimisation in educational technologies. Where social platforms are used for official communication or learning, alternative access should be considered for students who do not wish to expose personal accounts. Governance research supports the strategic importance of ethical accountability when technology shapes organisational practice (Yusof et al., 2026). The expected outcome is a more balanced responsibility model in which users are capable but not abandoned to manage structural risks alone. Sustainable digital citizenship depends on aligning user agency with systems that make responsible choices understandable, accessible, and credible. Institutional accountability strengthens user agency when platform choices, procurement practices, consent processes, and alternatives support informed participation.

5.5 Reflective Social Media Practices Supporting Digital Wellbeing

Institutions should strengthen reflective social media practice by helping Generation Z connect platform habits with attention, emotion, identity, relationships, learning, and well-being. The objective should not be a simplistic reduction of screen time but greater intentionality about what a platform is being used for, how long engagement continues, and whether the experience remains consistent with personal goals. Odgers and Jensen (2020) show why digital well-being research requires nuance, since effects vary by context and pattern of use. Practical implementation can include attention audits, notification reviews, purpose-based app use, reflective journaling, and discussions about social comparison and creator influence. Students should learn to identify when engagement is chosen and when it is being driven mainly by habit, anxiety, or external metrics. Human-centred work design research reinforces the broader principle that technology should support well-being and performance rather than undermine them (Abd Wahab & Yusof, 2020). The expected outcome is stronger self-regulation without framing social media itself as inherently harmful. Long-term value lies in preserving digital participation while increasing control over the conditions under which it occurs. Reflective platform use should strengthen intentionality without reducing digital wellbeing to simplistic screen-time targets.

Reflective social media practice should also address commercial and identity pressures so that students can recognise how social media links self-presentation with purchasing, visibility, and social comparison. Zaini et al. (2026) demonstrate the relevance of review perception to Generation Z spending, while Yusof, Abdul Razak and Mat Zin (2025) show how TikTok Shop combines commerce and engagement. Educational activities can ask students to analyse sponsored posts,

affiliate incentives, scarcity tactics, recommendation loops, and the emotional cues used to convert attention into purchase behaviour. They can also review their own posting choices and consider whether particular forms of content reflect personal values or are mainly responses to metric pressure. Research on digital participation illustrates that online environments can support inclusion and innovation when capability is present (Yusof et al., 2025). The goal is therefore not withdrawal but reflective agency. Generation Z should be able to participate, create, consume, and connect without treating algorithmic visibility or commercial approval as the primary measure of identity. Such capability gives digital citizenship longer-term relevance as platforms, business models, and social norms continue to change. Commercially reflective participation allows Generation Z to create, consume, connect, and express identity without surrendering judgement to visibility metrics.

6.0 CONCLUSION

Digital citizenship offers a comprehensive foundation for understanding responsible social media behaviour among Generation Z because it integrates ethics, literacy, rights, security, participation, and identity rather than treating digital problems as isolated technical risks. The analysis shows that frequent platform use cannot be assumed to produce responsible participation. Generation Z users operate within environments where algorithmic recommendation, rapid information circulation, social validation, commercial influence, and persistent data collection shape behaviour at the same time that individuals exercise choice. The central scholarly insight is therefore relational: responsible behaviour emerges from the interaction between personal capability and the conditions under which participation occurs. Ethical digital participation, information judgement, online respect, privacy agency, and reflective identity management form the conceptual foundation, while algorithmic attention capture, misinformation, cyberbullying, privacy erosion, and commercialised identity create pressures that can weaken those capabilities. This synthesis moves digital citizenship beyond a checklist of correct behaviours by explaining why users may fail to act responsibly even when they know basic rules. It also avoids a deficit view of Generation Z by recognising that young users possess significant digital experience while still requiring structured opportunities to develop judgement for increasingly complex social and technological environments. Digital citizenship is therefore best understood as an evolving capability system shaped jointly by individual judgement and digital environments.

Educational practice should develop responsible social media capability repeatedly across authentic contexts. Institutions should embed digital citizenship throughout curriculum and campus life, develop verification routines, strengthen ethical participation and bystander action, institutionalise privacy and security practice, and support reflective use connected with well-being and identity. These pathways are more credible than isolated awareness campaigns because they connect knowledge with behaviour and create social norms around responsible participation. The analysis also establishes a shared-responsibility model. Generation Z users must develop judgement, restraint, verification, empathy, privacy awareness, and self-regulation, but platforms and institutions also influence whether responsible choices are understandable, practical, and socially supported. Governance, design, moderation, data practices, and educational policy therefore form part of the digital citizenship environment. For educators, the objective is not to police every online action but to help learners practise decision making under realistic conditions of uncertainty, social pressure, and persuasive design. For platform-facing policy, the priority is to reduce avoidable friction against responsible behaviour and increase transparency where user agency depends on

understanding how content, data, and commercial influence are organised. Effective implementation requires shared responsibility across learners, educators, institutions, and platforms rather than isolated compliance messages.

The longer-term value of digital citizenship lies in preparing Generation Z for a digital society in which social media boundaries will continue to merge with education, employment, commerce, civic life, and artificial intelligence. Future research should therefore examine not only whether young people possess digital citizenship knowledge but how capability changes across platforms, life stages, cultures, and professional roles. Longitudinal research is needed to test whether verification habits, privacy agency, bystander capability, and algorithmic awareness remain stable when users encounter new technologies and incentives. Comparative studies can also evaluate how educational design, platform governance, and social norms interact to produce different patterns of responsible behaviour. The conceptual contribution developed here is to position responsible social media use as a capability system rather than a narrow set of safety practices. When ethical judgement, information literacy, rights awareness, social responsibility, and reflective identity management are reinforced together, Generation Z can participate more confidently without confusing connectivity with citizenship. The strategic goal is not a risk-free digital environment, which is unrealistic, but a generation of users who can recognise influence, evaluate consequences, protect rights, correct error, support others, and contribute constructively as networked social life continues to evolve. Future scholarship should test how these capabilities evolve across platforms, cultures, life stages, professional roles, and emerging technologies.

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2. Conflict of Interest

The authors declare that they have no financial, professional, personal, or institutional interests that could have influenced the development, interpretation, or presentation of this article. No competing interests or relationships exist that could reasonably be perceived as compromising the objectivity, academic integrity, or scholarly independence of the work.

3. Author Contribution Statement

Nur Husnina Aisyah Mohamed Suhaimi: Conceptualization, development of the conceptual framework, literature synthesis, interpretation of scholarly evidence, preparation of the original manuscript, and critical revision.

Nor Shamila Abdul Karim: Development and validation of the conceptual arguments, literature review, interpretation of digital citizenship and responsible social media perspectives, critical review, and manuscript editing.

Both authors contributed substantially to the intellectual development of the article, critically reviewed the manuscript for scholarly content and coherence, and approved the final version for publication.

4. Ethics Statement

This article is a conceptual review based exclusively on published scholarly literature and does not involve human participants, surveys, interviews, experiments, interventions, personal data, or primary data collection. Therefore, institutional ethical approval and informed consent were not required. The article was developed in accordance with established principles of academic integrity and responsible scholarship. All scholarly sources were appropriately acknowledged, and published evidence was critically interpreted to support the conceptual arguments presented. The authors assume responsibility for the integrity, accuracy, and scholarly presentation of the work.

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