

Digital Consumer Debt and Mental Well-Being in Generation Z: A Scoping Review

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Abstrak

Perkembangan pesat layanan keuangan digital, khususnya Buy Now Pay Later (BNPL), platform pinjaman daring, dan sistem kredit e-commerce, telah mengubah pola konsumsi Generasi Z. Meskipun layanan ini meningkatkan aksesibilitas finansial dan kemudahan transaksi, muncul kekhawatiran terkait dampak psikologisnya, seperti kecemasan, stres keuangan, perilaku pembelian kompulsif, dan penurunan kesejahteraan mental. Scoping review ini bertujuan untuk memetakan bukti ilmiah mengenai hubungan antara utang konsumtif digital dan kesejahteraan mental pada konsumen Generasi Z. Penelitian ini menggunakan kerangka PRISMA Extension for Scoping Reviews (PRISMA-ScR). Artikel relevan yang diterbitkan pada tahun 2019-2025 diidentifikasi melalui Google Scholar, jurnal terindeks Scopus, PubMed, dan ScienceDirect dengan menggunakan kata kunci terkait BNPL, utang digital, pinjaman fintech, Generasi Z, dan kesehatan mental. Kriteria inklusi difokuskan pada studi empiris dan tinjauan pustaka yang membahas perilaku peminjaman digital serta dampak psikologis pada populasi dewasa muda dan Generasi Z. Sebanyak 15 studi yang memenuhi syarat dianalisis. Hasil penelitian menunjukkan bahwa utang konsumtif digital secara konsisten berkaitan dengan meningkatnya stres keuangan, gejala kecemasan, kecenderungan pembelian impulsif, ketidakstabilan emosional, serta menurunnya kesejahteraan finansial pada pengguna Generasi Z. Beberapa studi juga menyoroti peran literasi keuangan, pengendalian diri, dan pengaruh media sosial sebagai faktor moderasi yang memengaruhi perilaku berutang. Selain itu, kemudahan akses dan rendahnya hambatan persepsi dalam meminjam turut berkontribusi pada normalisasi utang di kalangan konsumen muda. Oleh karena itu, ekspansi ekosistem pinjaman fintech memerlukan pendekatan yang seimbang antara inovasi finansial, aksesibilitas konsumen, dan perlindungan kesejahteraan psikologis. Tanpa literasi keuangan yang memadai dan regulasi pinjaman yang bertanggung jawab, normalisasi utang digital berpotensi meningkatkan kerentanan kesehatan mental pada generasi muda di masyarakat yang semakin terdigitalisasi. Tinjauan ini menyimpulkan bahwa meskipun teknologi pinjaman digital memberikan fleksibilitas ekonomi jangka pendek, ketergantungan berlebihan terhadap utang konsumtif dapat berdampak negatif terhadap kesejahteraan mental Generasi Z. Oleh karena itu, pembuat kebijakan, institusi pendidikan, dan penyedia layanan fintech perlu memperkuat inisiatif literasi keuangan serta menerapkan regulasi pinjaman yang bertanggung jawab guna meminimalkan risiko psikologis akibat paparan utang digital.

Kata Kunci: *Buy Now Pay Later (BNPL), utang digital, Generasi Z, kesejahteraan mental, pinjaman fintech, stres keuangan.*

Abstract

The rapid expansion of digital financial services, particularly Buy Now Pay Later (BNPL), online lending platforms, and e-commerce credit systems, has transformed consumption patterns among Generation Z. Although these services improve financial accessibility and transactional convenience, concerns have emerged regarding their psychological consequences, including anxiety, financial stress, compulsive buying behavior, and declining mental well-being. This scoping review aims to map existing evidence regarding the relationship between digital consumer debt and mental well-being among Generation Z consumers. This review employed the PRISMA Extension for Scoping Reviews (PRISMA-ScR) framework. Relevant articles published between 2019 and 2025 were identified from Google Scholar, Scopus-indexed journals, PubMed, and ScienceDirect using keywords related to BNPL, digital debt, fintech lending, Generation Z, and mental health. Inclusion criteria focused on empirical and review-based studies discussing digital borrowing behavior and psychological outcomes among young adults and Generation Z populations. A total of 15 eligible studies were analyzed. The findings indicate that digital consumer debt is consistently associated with elevated financial stress, anxiety symptoms, impulsive purchasing tendencies, emotional instability, and reduced financial well-being among Generation Z users. Several studies also highlight the role of financial literacy, self-control, and social media influence as moderating factors affecting borrowing behavior. Furthermore, easy accessibility and low perceived borrowing barriers contribute to debt normalization among younger consumers. The rapid expansion of fintech lending ecosystems therefore requires balanced approaches that simultaneously promote financial innovation, consumer accessibility, and psychological well-being protection. Without adequate financial literacy and responsible regulatory frameworks, the continued normalization of digital consumer debt may increase mental health vulnerabilities among younger generations in increasingly digitalized societies. This review concludes that while digital lending technologies provide short-term economic flexibility, excessive reliance on consumer debt may negatively influence mental well-being among Generation Z. Policymakers, educational institutions, and fintech providers should strengthen financial literacy initiatives and implement responsible lending regulations to minimize psychological risks associated with digital debt exposure.

Keywords: *Buy Now Pay Later, digital debt, Generation Z, mental well-being, fintech lending, financial stress*

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Introduction

Digital financial technology has rapidly transformed modern consumption patterns, particularly among younger generations. The emergence of Buy Now Pay Later (BNPL), online lending platforms, and e-commerce credit systems has significantly increased the

accessibility of short-term credit through digital ecosystems (Consumer Financial Protection Bureau [CFPB], 2022). Generation Z, commonly defined as individuals born between 1997 and 2012, represents one of the most active user groups of these financial technologies due to their high engagement with mobile commerce and digital platforms (Abed, 2024).

The rapid expansion of digital financial ecosystems has fundamentally altered the way younger consumers interact with credit systems and purchasing activities. Fintech innovations have increasingly blurred the boundaries between consumption and borrowing by integrating instant credit features directly into e-commerce platforms (Asian Development Bank, 2023). The post-pandemic acceleration of digital commerce has also contributed to increased reliance on alternative financial services among younger populations, particularly in emerging economies where conventional banking accessibility remains uneven (CFPB, 2023).

Generation Z consumers are often characterized by high levels of digital engagement, mobile dependency, and exposure to online consumer culture. This demographic is particularly vulnerable to impulsive purchasing behavior because digital environments continuously promote lifestyle-oriented consumption and social comparison (Dittmar, 2005). Several scholars argue that online shopping platforms and social media algorithms contribute to the normalization of immediate gratification behavior, potentially encouraging excessive borrowing practices among younger users (Tokunaga, 1993).

Recent studies indicate that Generation Z consumers tend to prefer BNPL services over traditional credit cards because of simplified registration systems, instant approval processes, and perceived affordability through installment-based repayment structures (Investopedia, 2022). However, the rapid normalization of digital borrowing has raised concerns regarding financial vulnerability and psychological well-being among younger users (Gebeyehu, 2023).

In Southeast Asia, the expansion of fintech lending services has accelerated substantially during the post-pandemic digital economy transition. Indonesia, Malaysia, Singapore, and the Philippines have experienced significant growth in e-commerce-driven financial services, particularly among university students and early-career adults (Asian Development Bank, 2023). Indonesia itself represents one of the fastest-growing BNPL markets in ASEAN due to increased smartphone penetration and the dominance of digital marketplaces such as Shopee, Tokopedia, and TikTok Shop.

Several scholars argue that the accessibility and low-friction nature of digital lending systems may encourage impulsive buying behavior, debt normalization, and poor financial self-regulation among young consumers (Sarifuddin, 2025). Unlike conventional banking loans, BNPL services psychologically reduce the perceived burden

of debt because repayments are divided into smaller installments, making borrowing appear harmless or routine (Laleb, 2026).

Financial debt has long been recognized as an important predictor of psychological distress and reduced mental well-being. Previous studies consistently demonstrate that individuals experiencing financial insecurity are more likely to report anxiety symptoms, emotional exhaustion, sleep disturbances, and depressive tendencies (Fitch et al., 2011; Turunen & Hiilamo, 2014). Sweet et al. (2013) further explained that chronic debt exposure may function as a prolonged stressor that negatively affects both psychological and physical health outcomes. Previous studies have also demonstrated that debt-related financial stress may contribute to anxiety, emotional instability, sleep disturbances, and reduced mental well-being among young adults (Richardson et al., 2013). Financial insecurity is increasingly recognized as an important determinant of psychological health, particularly among digitally connected populations exposed to consumerist pressures and social comparison culture through social media environments.

Despite growing academic interest in fintech adoption and digital consumer behavior, relatively few review studies have specifically mapped the relationship between digital consumer debt and mental well-being among Generation Z populations within ASEAN contexts. Most prior reviews focus on fintech usability, economic accessibility, or consumer purchasing behavior rather than psychosocial outcomes.

This study offers several important contributions to the existing literature. First, unlike previous reviews that primarily focus on fintech adoption, consumer behavior, or economic accessibility, this study specifically emphasizes the relationship between digital consumer debt and mental well-being among Generation Z users. Second, this review strengthens the ASEAN perspective by highlighting emerging evidence from Indonesia, Malaysia, and other Southeast Asian countries where fintech lending adoption has increased rapidly but mental health implications remain underexplored. Third, the study contextualizes digital debt within Southeast Asia's highly digitalized consumer culture, where social media influence, online marketplace ecosystems, and installment-based purchasing systems have become normalized among younger populations. Finally, this review integrates psychological well-being discussions into digital financial behavior literature, offering interdisciplinary insights relevant to policymakers, mental health researchers, and fintech regulators in developing economies.

The ASEAN region presents a unique environment for studying digital consumer debt because fintech expansion occurs alongside rapidly growing e-commerce ecosystems and relatively uneven financial literacy levels. In Indonesia, digital lending services are increasingly integrated into online marketplaces, making installment-based consumption highly accessible to university students and early-career workers. Similar trends are observed in Malaysia and the Philippines, where BNPL adoption has accelerated among

younger consumers due to aggressive fintech marketing and smartphone-based financial services.

This regional context differs from Western countries where credit card systems have historically dominated consumer financing. In ASEAN countries, many Generation Z users encounter formal credit systems for the first time through digital lending applications rather than conventional banking institutions. Consequently, digital debt normalization may emerge more rapidly and with limited financial preparedness, potentially increasing psychological vulnerability among young consumers.

Therefore, this scoping review seeks to synthesize current evidence regarding the association between digital consumer debt and mental well-being among Generation Z consumers, with particular attention to emerging patterns within Indonesia and Southeast Asia. This study also aims to identify major psychological outcomes, behavioral risk factors, and research gaps that may inform future fintech regulation and financial literacy interventions.

METHODOLOGY

This study employed a scoping review approach guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) framework developed by Tricco et al. (2018). A scoping review was considered appropriate because the relationship between digital consumer debt and mental well-being remains interdisciplinary and conceptually diverse across financial technology, psychology, and consumer behavior research.

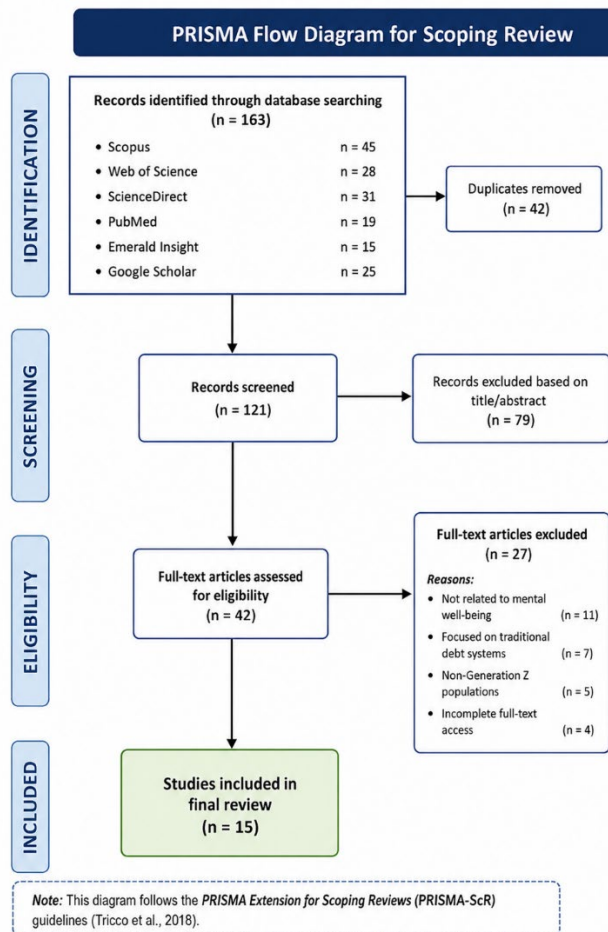
Database Sources and Search Strategy

The literature search was conducted between May 2026 using several international academic databases to ensure broad coverage and source credibility. Six databases included: Scopus, Web of Science (WoS), ScienceDirect, PubMed, Emerald Insight and Google Scholar. Scopus and Web of Science were prioritized as primary indexing databases due to their strong peer-review quality control and international journal coverage. The search strategy combined keywords and Boolean operators related to digital borrowing and psychological outcomes. The main search strings included: "Buy Now Pay Later" AND "mental health"; "digital debt" AND "Generation Z"; "online lending" AND "financial stress"; "fintech borrowing" AND "psychological well-being"; "e-commerce credit" AND "young adults"; "PayLater" AND "anxiety". The search focused on articles published between 2019 and 2025 to capture contemporary developments in fintech lending ecosystems and post-pandemic digital consumption trends.

Screening and Eligibility Process

The initial search identified 163 records across all databases. Duplicate records were removed using reference management software (Mendeley), resulting in 121 remaining articles. Title and abstract screening excluded studies unrelated to digital debt or psychological outcomes. A total of 42 full-text articles were subsequently assessed for eligibility. Studies were included if they: Were published in English; Focused on Generation Z or young adults aged 18–30 years; Discussed digital debt, BNPL, online loans, or fintech borrowing; Examined mental well-being, stress, anxiety, or related psychological outcomes. Studies focusing solely on traditional banking systems, mortgage debt, or non-digital lending were excluded. Finally, 15 articles met all eligibility criteria and were included in the final synthesis.

Figure 1. PRISMA Diagram for Scoping Review



Critical Appraisal Procedure

To improve methodological rigor, all included studies were critically appraised using the Joanna Briggs Institute (JBI) Critical Appraisal Tools. The appraisal process aimed to assess the quality, validity, and risk of bias of the included studies. Different JBI checklists were applied according to study design: JBI Checklist for Analytical Cross-Sectional Studies, Qualitative Research, and Systematic Reviews and Research Syntheses. Each study was evaluated based on methodological criteria such as clarity of inclusion criteria; reliability of measurement methods; identification of confounding factors; validity of outcome assessment; appropriateness of statistical analysis; and transparency of conclusions. Studies were categorized into: High Quality (80–100%); Moderate Quality (60–79%); and Low Quality (<60%). No studies were excluded based solely on quality appraisal because the purpose of this scoping review was to broadly map available evidence.

Based on the Joanna Briggs Institute (JBI) critical appraisal, most included studies demonstrated moderate-to-high methodological quality. Six studies achieved high-quality ratings with scores above 80%, particularly studies employing validated survey instruments and transparent analytical procedures. Meanwhile, industry reports and market analyses generally received moderate ratings due to limited methodological transparency and absence of peer-review processes. Nevertheless, these sources were retained to enrich contextual understanding regarding rapidly evolving fintech lending trends among Generation Z consumers.

Table 1 Article Characteristics

Author	Year	Country	Study Design	Main Topic	Key Findings	JBI Score	Quality
Abed	2024	Saudi Arabia	Cross-sectional survey	BNPL adoption	Gen Z highly influenced by fintech usability	7/8	High
Gebeyehu	2023	Sweden	Narrative review	BNPL financial risks	BNPL associated with debt vulnerability	8/10	High
Khoirunisa	2025	Indonesia	Quantitative survey	Financial literacy	Literacy reduces risky BNPL behavior	6/8	Moderate
Sarifuddin	2025	Malaysia	Qualitative study	BNPL financial risk	Emotional pressure linked to debt burden	8/10	High
Laleb	2026	Indonesia	Behavioral analysis	Planned behavior theory	Easy borrowing weakens self-control	6/8	Moderate
Richardson et al.	2013	United Kingdom	Cross-sectional study	Financial stress and mental health	Debt associated with anxiety and stress	8/8	High

Author	Year	Country	Study Design	Main Topic	Key Findings	JBI Score	Quality
CFPB	2022	United States	Policy review	Consumer protection	Multiple BNPL loans increase financial risk	7/10	Moderate
RSIS International	2025	Malaysia	Quantitative survey	Impulsive buying behavior	BNPL increases impulsive purchases	7/8	High
Fairness Foundation	2025	United Kingdom	Economic report	Youth debt burden	Negative wealth affects well-being	6/10	Moderate
TIME Magazine	2021	United States	Consumer analysis	Holiday BNPL usage	Overspending risk among youth	5/10	Moderate
Azzahra	2026	Indonesia	Qualitative study	Debt normalization	Digital debt increasingly normalized	7/10	High
Business Insider	2025	United States	Market analysis	Credit score impact	Late repayment harms financial stability	5/10	Moderate
Emerald Review	2024	Global	Narrative review	Fintech psychology	Digital borrowing affects well-being	8/10	High
Investopedia	2022	United States	Market report	BNPL preferences	Young consumers prefer BNPL systems	5/10	Moderate
PYMNTS	2022	United States	Industry survey	Consumer payment behavior	BNPL heavily used by younger consumers	6/10	Moderate

Characteristics of Included Studies

A total of 15 studies met the eligibility criteria and were included in the final synthesis. Most studies were published between 2021 and 2025, reflecting increasing academic interest in digital consumer debt and fintech-related behavioral issues following the rapid expansion of post-pandemic digital commerce ecosystems.

Geographically, the included studies were dominated by research conducted in Asian countries, particularly Indonesia, Malaysia, China, and Saudi Arabia. Several studies from the United States and the United Kingdom were also included to provide broader contextual understanding regarding BNPL adoption and debt-related psychological outcomes (CFPB, 2022; Fairness Foundation, 2025).

The majority of studies employed quantitative cross-sectional survey methods, while several utilized qualitative interviews, narrative reviews, and policy analyses. Most studies focused on Buy Now Pay Later (BNPL) systems, e-commerce installment features, fintech lending applications, and online consumer credit services.

The psychological outcomes discussed in the reviewed literature primarily included: Financial stress; Anxiety symptoms; Emotional distress; Impulsive buying behavior; Financial insecurity; and Reduced psychological well-being.

Digital Consumer Debt and Financial Stress

Several reviewed studies indicated that Generation Z consumers often perceive BNPL systems as safer and more manageable compared to traditional credit cards due to smaller repayment installments and simplified digital interfaces (Abed, 2024). Studies conducted in Indonesia and Malaysia also reported that many young consumers use PayLater systems for non-essential lifestyle purchases, including fashion products, gadgets, travel, and entertainment subscriptions (Sarifuddin, 2025).

Financial stress emerged as the most consistently reported outcome associated with digital consumer debt. Several studies demonstrated that Generation Z consumers frequently experience repayment anxiety due to multiple installment obligations and poor budgeting practices (Gebeyehu, 2023; Richardson et al., 2013).

Sarifuddin (2025) found that BNPL users in Malaysia often underestimated cumulative debt burdens because installment payments appeared financially manageable in the short term. However, repeated use of multiple BNPL platforms increased emotional pressure and financial insecurity over time.

Similarly, the Consumer Financial Protection Bureau (2022) reported that younger consumers commonly maintain overlapping BNPL loans across several digital platforms, increasing the risk of repayment difficulties and financial instability.

Impulsive Buying Behavior

Another major theme identified across the literature was the relationship between digital debt systems and impulsive consumption behavior. Studies consistently showed that the availability of flexible installment-based payments reduced consumers' perceived financial barriers and encouraged spontaneous purchasing decisions (RSIS International, 2025).

In Indonesia and Malaysia, social media marketing and influencer-driven consumer culture were identified as important contributors to impulsive borrowing and online spending among Generation Z populations (Khoirunisa, 2025; Sarifuddin, 2025). BNPL systems were frequently used not only for essential purchases but also for lifestyle-oriented consumption, including fashion, gadgets, cosmetics, and entertainment products.

Abed (2024) further explained that Generation Z consumers are particularly attracted to fintech lending services because of convenience, rapid approval systems, and seamless integration with e-commerce applications.

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Studies conducted in Indonesia and Malaysia also reported that many young consumers use PayLater systems for non-essential lifestyle purchases, including fashion products, gadgets, travel, and entertainment subscriptions (Sarifuddin, 2025).

From a behavioral economics perspective, BNPL systems may exploit present-bias decision-making tendencies, where consumers prioritize immediate gratification while underestimating future repayment consequences (Brown et al., 2005). The psychological separation between purchasing and repayment processes may reduce consumers' awareness of accumulated debt exposure, increasing the likelihood of impulsive spending and financial mismanagement.

Anxiety and Emotional Well-Being

Several reviewed studies reported that debt-related financial concerns negatively affected emotional and psychological well-being. Richardson et al. (2013) demonstrated that financial insecurity is significantly associated with anxiety symptoms and psychological distress among young adults. Gebeyehu (2023) similarly argued that repeated exposure to digital borrowing systems may increase emotional vulnerability due to long-term repayment uncertainty and financial dependence. In qualitative interviews conducted by Sarifuddin (2025), several participants described feelings of guilt, emotional pressure, and fear regarding repayment obligations after excessive BNPL usage.

The literature further suggests that debt-related stress is not solely associated with repayment difficulties but also with social and emotional pressure. Young consumers may experience feelings of embarrassment, fear, or guilt when they are unable to maintain digitally constructed lifestyles or fulfill repayment obligations (Gebeyehu, 2023). In qualitative studies, several participants described emotional discomfort arising from continuous financial obligations despite temporary satisfaction gained from online purchases (Sarifuddin, 2025). Moreover, the normalization of online borrowing among peer groups may intensify hidden psychological pressure, where young consumers attempt to maintain digital lifestyles despite limited financial resources (Laleb, 2026).

The findings of this review support previous evidence suggesting that financial insecurity functions as a chronic psychological stressor. Prolonged exposure to debt-related uncertainty may gradually reduce emotional resilience and increase vulnerability to anxiety-related symptoms (Sweet et al., 2013). Moreover, digitally connected consumers may experience additional psychological pressure due to social comparison

culture, where online identity and consumption patterns become strongly interconnected.

Financial Literacy as a Moderating Factor

Financial literacy and self-control repeatedly emerged as important moderating variables and important protective factor against excessive digital borrowing behavior. Individuals with stronger budgeting skills and higher financial awareness generally demonstrated lower tendencies toward compulsive debt accumulation (Disney & Gathergood, 2013). Gathergood (2012) also emphasized that poor self-control significantly increases the risk of consumer over-indebtedness, particularly among younger populations with limited financial experience.

Khoirunisa (2025) also reported that individuals with stronger financial management knowledge demonstrated lower tendencies toward impulsive borrowing and more responsible repayment behavior. Several studies suggested that financial literacy improves consumers' awareness regarding debt accumulation, repayment risks, and long-term financial consequences (CFPB, 2022). Consequently, financially literate individuals tend to demonstrate greater self-control when using digital lending services.

ASEAN and Indonesia Context

The ASEAN region presents unique sociocultural conditions influencing digital borrowing behavior. Rapid urbanization, smartphone penetration, and aggressive e-commerce expansion have created highly consumption-oriented digital environments among younger populations (Asian Development Bank, 2023).

An important finding of this review is the growing relevance of digital consumer debt within ASEAN countries, particularly Indonesia and Malaysia. Rapid fintech expansion, increasing smartphone penetration, and highly integrated e-commerce ecosystems have accelerated BNPL adoption among younger consumers in the region.

Unlike Western countries where traditional credit card systems have historically dominated consumer financing, many ASEAN users encounter formal credit systems for the first time through digital lending applications (Asian Development Bank, 2023). In Indonesia, installment-based payment systems have become increasingly embedded within everyday online shopping practices, making digital borrowing appear socially acceptable and financially routine among university students and early-career workers. This condition may increase vulnerability among younger consumers who possess limited financial preparedness and debt management experience. Furthermore, the integration of PayLater systems into major e-commerce platforms such as Shopee, Tokopedia, Lazada, and TikTok Shop has normalized installment-based consumption behavior among university students and early-career workers in Indonesia. This

emerging phenomenon highlights the importance of region-specific financial literacy interventions and responsible fintech regulation.

The findings of this scoping review indicate that digital consumer debt has become an increasingly important psychosocial issue among Generation Z consumers. Although fintech-based credit systems offer convenience, accessibility, and short-term purchasing flexibility, they simultaneously create new forms of financial vulnerability and psychological distress (CFPB, 2022).

One major issue identified across the reviewed studies is the normalization of debt within digital consumption culture. Unlike conventional credit systems, Buy Now Pay Later (BNPL) services minimize the perceived seriousness of borrowing through simplified approval procedures and installment-based repayment structures (Laleb, 2026). As a result, many young consumers psychologically perceive digital debt as a routine component of online shopping behavior rather than a formal financial obligation.

This phenomenon appears particularly significant within ASEAN countries such as Indonesia and Malaysia, where digital commerce ecosystems continue to expand rapidly. The integration of installment-based payment systems into e-commerce applications has increased the accessibility of borrowing among university students and young workers with limited financial literacy (Khoirunisa, 2025). Similar patterns have been observed in Malaysia, where BNPL adoption among Generation Z users is strongly influenced by convenience, social trends, and lifestyle-oriented consumption behavior (Sarifuddin, 2025).

The review also demonstrates that digital debt exposure is closely associated with impulsive buying behavior. Previous studies have shown that the availability of flexible installment systems reduces consumers' perception of immediate financial burden, thereby encouraging spontaneous purchasing decisions (RSIS International, 2025). Social media environments further intensify this behavior by promoting consumerist lifestyles and social comparison pressures among digitally connected youth populations.

In addition, financial stress emerged as one of the most consistently reported psychological outcomes associated with digital borrowing. Richardson et al. (2013) found that debt-related financial insecurity significantly contributes to anxiety symptoms, emotional distress, and reduced mental well-being among young adults. Similarly, Gebeyehu (2023) argued that repeated exposure to BNPL systems may increase long-term financial vulnerability due to accumulated repayment obligations and poor budgeting practices.

The psychological implications of digital debt may be particularly severe among Generation Z consumers because this demographic group is highly exposed to online social validation and identity construction through consumption patterns. Many young

consumers use digital purchases as part of self-expression and social belonging within online communities (Abed, 2024). Consequently, debt-related pressure may not only affect economic conditions but also emotional security and self-esteem.

Another important finding concerns the role of financial literacy as a protective factor. Several studies demonstrated that individuals with stronger financial management skills tend to exhibit lower levels of impulsive borrowing and greater awareness regarding repayment risks (Khoirunisa, 2025). Financial literacy therefore appears to function as an important moderating variable that may reduce the negative psychological effects of digital consumer debt.

From a policy perspective, the findings highlight the need for stronger consumer protection regulations within rapidly growing fintech ecosystems. The Consumer Financial Protection Bureau (2022) warned that overlapping BNPL loans and inadequate repayment transparency may expose younger consumers to unsustainable debt cycles. In ASEAN countries where fintech regulation is still evolving, responsible lending frameworks and mental health-sensitive financial policies remain critically important. The growing integration of fintech lending into e-commerce ecosystems highlights the importance of responsible lending regulations and consumer protection mechanisms. Policymakers should encourage transparency regarding repayment risks, late payment penalties, and cumulative borrowing exposure (CFPB, 2023). Educational institutions may also play an important role by integrating digital financial literacy programs into university curricula to improve responsible financial decision-making among younger consumers.

Study Limitations

Based on the Joanna Briggs Institute (JBI) critical appraisal, most included studies demonstrated moderate-to-high methodological quality. Quantitative studies generally showed strong validity in sampling procedures, measurement tools, and statistical analysis techniques. High-quality studies commonly provided clear inclusion criteria, validated psychological assessment instruments, and transparent analytical procedures (Richardson et al., 2013; Abed, 2024). Meanwhile, industry reports and market analyses generally received moderate appraisal scores due to limited methodological transparency and absence of peer-review processes. Nevertheless, these reports were retained because they provided important contextual evidence regarding rapidly evolving fintech trends and consumer behavior patterns among Generation Z populations.

This review also emphasizes the importance of interdisciplinary approaches in understanding digital borrowing behavior. Existing studies often focus separately on financial technology adoption, consumer behavior, or psychological well-being. However, the present findings suggest that digital debt should be understood as a

multidimensional issue involving behavioral economics, financial literacy, social media culture, and mental health simultaneously.

Despite providing valuable insights, this review has several limitations. First, the majority of included studies employed cross-sectional designs, limiting causal interpretation between digital debt exposure and mental well-being outcomes. Second, most available evidence remains concentrated in high-income countries, while empirical studies from ASEAN countries remain relatively limited. Third, variations in terminology and measurement approaches across studies may affect comparability of findings.

Future studies should therefore prioritize longitudinal and mixed-methods approaches to better understand the long-term psychological effects of digital consumer debt among Generation Z populations. Further research focusing on Indonesia and Southeast Asia is also necessary to examine cultural, economic, and regulatory factors influencing digital borrowing behavior and mental well-being outcomes.

CONCLUSION

This scoping review demonstrates that digital consumer debt should not merely be understood as an economic issue but also as a significant public mental health concern among Generation Z consumers. The increasing use of BNPL systems, online loans, and e-commerce credit services contributes to financial stress, impulsive consumption behavior, anxiety symptoms, and emotional instability.

The increasing normalization of installment-based consumption within digital ecosystems may contribute to long-term psychological vulnerability if responsible borrowing practices and financial literacy are not adequately strengthened. Although digital lending technologies provide convenience and short-term purchasing flexibility, excessive reliance on digital debt may negatively affect psychological well-being and financial security. Financial literacy, self-control, and responsible borrowing awareness appear to be important protective factors against harmful debt-related outcomes.

The rapid expansion of fintech lending ecosystems therefore requires balanced approaches that simultaneously promote financial innovation, consumer accessibility, and psychological well-being protection. Without adequate financial literacy and responsible regulatory frameworks, the continued normalization of digital consumer debt may increase mental health vulnerabilities among younger generations in increasingly digitalized societies.

Future research should explore longitudinal relationships between digital debt exposure and mental health outcomes, social identity, and financial behavior among Generation Z populations in ASEAN countries, particularly within developing countries where fintech

adoption continues to expand rapidly. Policymakers, educational institutions, and fintech companies must collaborate to promote sustainable digital financial behavior among younger generations.

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