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Fintech, Digital Inequality, and Inclusive Economic Development: A Systematic Literature Review

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ABSTRACT

The rapid expansion of fintech and digital financial systems has transformed contemporary economic activities by increasing financial accessibility and accelerating participation within digital economies. However, the benefits of fintech-driven financial inclusion remain uneven due to persistent digital inequality, socio-economic exclusion, and governance disparities across populations and institutions. The findings indicate that fintech contributes positively to economic participation, entrepreneurship, and financial accessibility through digital financial services and technological innovation. Nevertheless, unequal technological access, limited digital literacy, gender disparities, financial vulnerability, and institutional limitations continue to restrict participation among vulnerable populations. The review further demonstrates that governance quality and institutional readiness significantly influence whether fintech-driven transformation produces inclusive or unequal economic outcomes. The study concludes that inclusive digital economic development requires integrated approaches combining financial innovation, governance adaptation, digital capability development, and social inclusion strategies to reduce exclusion within fintech-driven financial systems.

Keywords: *Digital Inequality, Fintech, Financial Inclusion, Inclusive Economic Development, Social Exclusion.*

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1. | INTRODUCTION

The rapid expansion of fintech and digital financial systems has transformed contemporary economic activities by reshaping how individuals, businesses, and institutions access and utilize financial services. Digital technologies such as mobile banking, digital payments, fintech applications, and online financial platforms have increased the accessibility and efficiency of financial transactions across different economic environments. Gabor and Brooks (2020) emphasize that the digital transformation of finance has become closely connected to broader economic development strategies through fintech-driven financial inclusion initiatives. Similarly, Beck (2020) highlights that fintech creates opportunities to expand financial inclusion by improving financial accessibility and reducing barriers associated with traditional banking systems. These developments have positioned digital finance as a major component of the digital economy and contemporary economic transformation. Consequently, fintech is increasingly viewed as a mechanism for promoting economic participation and inclusive development within both developed and developing economies.

The growing importance of fintech has also intensified discussions regarding its relationship with inclusive economic development and financial participation. Financial inclusion is widely regarded as an important factor in reducing poverty, supporting entrepreneurship, and increasing participation in formal economic systems. Khera et al. (2021) emphasize that digital financial inclusion can contribute to economic growth by expanding financial accessibility among underserved populations. Van et al. (2021) further argue that financial inclusion supports broader economic development by facilitating participation in productive economic activities. In addition, Pradhan et al. (2021) identify a strong relationship between financial inclusion, technological development, and sustainable economic growth. These findings suggest that fintech-driven financial systems have the potential to strengthen economic participation and improve economic opportunities. As a result, governments and institutions increasingly promote digital finance as part of inclusive economic development strategies.

Despite these opportunities, recent literature also highlights that fintech-driven financial inclusion does not affect all populations equally and may generate new forms of inequality and exclusion within digital economies. While fintech can improve access to financial services, participation in digital financial systems depends heavily on technological access, digital literacy, financial capability, and socio-economic conditions. Greene (2021) argues that access to digital technologies is shaped by broader socio-economic inequalities that influence participation within digital systems. Gangadharan (2021) further highlights that digital exclusion reflects structural and political inequalities embedded within technological environments. In many contexts, vulnerable populations continue to face barriers in accessing and utilizing digital financial services effectively. These findings indicate that fintech-driven inclusion can simultaneously expand and restrict economic opportunities depending on institutional

and socio-economic conditions. Consequently, the relationship between fintech and inclusive development remains complex and uneven.

The literature further demonstrates that digital inequality is influenced not only by technological accessibility but also by demographic and social vulnerabilities that shape participation in digital financial systems. Vulnerable groups such as women, older adults, and economically marginalized populations often experience greater barriers to fintech adoption and financial participation. Mubarak and Suomi (2022) highlight that digital exclusion remains a significant issue among older adults within increasingly digitalized societies. Hasan et al. (2023) further emphasize that digital financial literacy significantly influences financial inclusion among women entrepreneurs. In addition, Chen et al. (2023) identify the persistence of gender disparities within fintech-driven financial systems, particularly in access to financial services and lending opportunities. These findings suggest that digital financial inclusion may reproduce existing social inequalities when governance systems fail to address demographic and structural disparities. Therefore, inclusive economic development requires greater attention to vulnerable populations within digital financial ecosystems.

Governance quality and regulatory capacity also play a critical role in determining whether fintech contributes to inclusive or unequal economic outcomes. The rapid growth of digital financial systems has created challenges for governance structures that often struggle to adapt to technological transformation and emerging financial risks. Avgouleas and Marjosola (2021) emphasize that digital finance requires adaptive governance frameworks capable of addressing evolving financial and technological environments. Brown and Piroska (2022) further argue that fintech governance involves balancing innovation, regulation, and consumer protection within increasingly complex digital economies. In contexts where institutional readiness and regulatory coordination remain weak, fintech expansion may increase financial vulnerability and unequal participation. These conditions demonstrate that inclusive fintech development depends not only on technological innovation but also on governance effectiveness and institutional adaptation. Consequently, governance disparities become an important factor influencing digital inequality within fintech-driven economies.

Although the literature on fintech and financial inclusion has expanded significantly in recent years, existing studies often focus on either economic opportunities or technological adoption without comprehensively synthesizing the broader relationship between fintech, inequality, and inclusive development. Many studies emphasize the positive economic impacts of fintech while giving less attention to exclusion risks, governance disparities, and unequal digital participation. In addition, research examining digital inequality frequently addresses specific demographic or regional issues rather than integrating these findings within broader discussions of inclusive economic development. This creates a fragmented understanding of how fintech simultaneously generates opportunities and reproduces socio-economic disparities within digital economies. Consequently, there remains a need for a more

comprehensive synthesis of the literature that integrates economic, governance, and inequality perspectives. Addressing this gap is important for understanding the broader implications of fintech-driven economic transformation.

Based on these considerations, this study aims to systematically review the literature on fintech, digital inequality, and inclusive economic development using a qualitative Systematic Literature Review (SLR) approach. The study focuses on identifying the major economic opportunities associated with fintech while also examining the factors that contribute to digital inequality and exclusion within fintech-driven financial systems. Using thematic synthesis, the review analyzes how governance quality, technological accessibility, financial literacy, and socio-economic vulnerability influence participation in digital financial ecosystems. Snyder (2019) emphasizes that systematic literature reviews enable researchers to identify conceptual relationships and emerging research patterns within complex research domains. In addition, Page et al. (2021) highlight that systematic review methodologies improve transparency and rigor in evidence synthesis. Through this approach, the study seeks to provide a more integrated understanding of how fintech influences inclusive economic development within contemporary digital economies.

2. | LITERATURE REVIEW

Fintech and Digital Economic Transformation

The expansion of fintech has become one of the defining characteristics of contemporary digital economic transformation, reshaping financial systems, economic interactions, and access to financial services. Fintech technologies such as mobile banking, digital payments, online lending platforms, and electronic financial systems have accelerated the integration of digital technologies into economic activities. Gabor and Brooks (2020) emphasize that fintech-driven financial transformation has become closely linked to broader international development strategies and economic modernization processes. Beck (2020) further argues that fintech creates opportunities to expand financial accessibility by reducing barriers associated with traditional banking systems. In addition, Yang and Zhang (2022) highlight that digital finance contributes to organizational and economic transformation through the expansion of digital economic activities. These developments indicate that fintech has become increasingly integrated into contemporary economic systems and development strategies. Consequently, fintech is often viewed as a catalyst for digital economic growth and financial innovation.

The transformation of financial systems through fintech has also increased opportunities for broader financial participation and economic inclusion. Kandpal and Mehrotra (2019) emphasize that fintech and digital financial services play a major role in expanding financial inclusion, particularly in emerging economies with limited traditional banking access. Similarly, Tok and Heng (2022) argue that fintech has the potential to increase financial accessibility by enabling more efficient and flexible financial services. However, the literature also suggests that fintech transformation may

generate uneven outcomes depending on institutional and technological conditions. Gancarczyk et al. (2022) highlight that governance dynamics and socio-economic conditions significantly influence the outcomes of fintech transformation within different economic contexts. These findings indicate that fintech transformation involves not only technological change but also institutional and governance adaptation. Therefore, the effectiveness of fintech-driven economic transformation depends on broader socio-economic and regulatory conditions.

Financial Inclusion and Inclusive Economic Development

Financial inclusion is widely regarded as an important component of inclusive economic development due to its role in expanding economic participation and reducing barriers to financial access. Digital financial systems allow individuals and businesses to access financial services more efficiently through technological platforms that reduce geographical and institutional limitations. Khera et al. (2021) emphasize that digital financial inclusion contributes to economic growth by improving access to financial resources among underserved populations. Van et al. (2021) further argue that financial inclusion supports economic productivity and development through increased participation in formal financial systems. In addition, Pradhan et al. (2021) identify a strong relationship between technological development, financial inclusion, and sustainable economic growth. These findings suggest that fintech-driven financial inclusion can strengthen economic participation and broaden access to economic opportunities. Consequently, digital finance is increasingly incorporated into inclusive economic development policies.

The literature also demonstrates that financial inclusion contributes to poverty reduction and broader socio-economic development, particularly in developing economies. Omar and Inaba (2020) highlight that financial inclusion can reduce poverty and income inequality by improving access to financial services among disadvantaged populations. Demir et al. (2022) further identify a relationship between fintech-driven financial inclusion and changes in income distribution. Kling et al. (2022) additionally argue that financial inclusion and inequality are interconnected within broader economic systems and institutional structures. However, the literature indicates that the outcomes of financial inclusion are not universally positive and may vary depending on governance quality and socio-economic conditions. In contexts where institutional support and financial capability remain limited, digital financial inclusion may produce uneven development outcomes. Therefore, inclusive economic development depends not only on expanding financial access but also on ensuring equitable participation within digital financial systems.

Digital Inequality and Social Exclusion

Despite the expansion of fintech and digital finance, digital inequality remains a major challenge affecting participation within digital economic systems. Access to fintech services is often shaped by disparities in technological infrastructure, socio-economic status, digital literacy, and institutional accessibility. Greene (2021) argues that technological participation is influenced by broader socio-economic inequalities that determine who can benefit from digital systems. Gangadharan (2021) further emphasizes that digital exclusion reflects structural inequalities embedded within digital environments and governance systems. In addition, Rana et al. (2020) identify infrastructural limitations and institutional barriers as significant obstacles to the adoption of digital financial services in emerging economies. These findings suggest that digital transformation may reproduce existing inequalities if access to technological resources remains uneven. Consequently, fintech-driven economic transformation does not automatically guarantee inclusive participation across all social groups.

The literature also highlights that digital inequality is closely connected to social exclusion and financial vulnerability within digital economies. Mhlanga (2022) argues that financial inclusion and social exclusion are interconnected through broader socio-economic and psychological conditions associated with poverty and technological inequality. Mubarak and Suomi (2022) further identify the growing "grey digital divide," where older populations face significant barriers in participating within digital systems. In addition, Liu and Guo (2023) demonstrate that digital financial inclusion can influence vulnerability to relative poverty depending on levels of technological access and financial capability. These findings indicate that digital inequality involves more than technological access alone and includes broader social and economic vulnerabilities. As a result, digital financial inclusion initiatives may unintentionally reinforce exclusion among vulnerable populations if structural inequalities are not addressed. Therefore, inclusive economic development requires policies that address both financial accessibility and socio-economic exclusion.

Gender, Vulnerability, and Financial Capability

The literature further demonstrates that demographic and social vulnerabilities significantly influence participation in fintech-driven financial systems. Women, older adults, and economically marginalized populations often face greater barriers to digital financial participation due to disparities in financial literacy, technological access, and socio-economic resources. Hasan et al. (2023) emphasize that digital financial literacy plays a major role in shaping financial inclusion among women entrepreneurs. Similarly, Kofman and Payne (2021) argue that gender inequality remains a significant issue within digital financial inclusion due to unequal access to technological and financial resources. Chen et al. (2023) further identify the persistence of gender disparities in fintech-driven lending and financial participation. These findings suggest that digital financial inclusion can reproduce gender-based inequalities when

governance systems fail to address unequal participation conditions. Consequently, inclusive economic development requires gender-sensitive approaches to fintech governance and digital finance policies.

Financial capability and literacy also play a critical role in shaping the effectiveness of fintech participation and financial inclusion outcomes. Khan et al. (2022) emphasize that financial literacy is essential for enabling individuals to effectively utilize financial services and participate in digital financial systems. Morgan et al. (2019) further highlight the importance of digital financial literacy in supporting participation within increasingly digitalized economies. In addition, Seldal and Nyhus (2022) identify a strong relationship between financial vulnerability, financial literacy, and the use of digital payment technologies. These findings indicate that fintech accessibility alone is insufficient if individuals lack the knowledge and capability necessary to utilize digital financial services effectively. Without adequate financial capability, vulnerable populations may face increased risks of exclusion and financial instability. Therefore, digital literacy and financial capability development are essential components of inclusive fintech ecosystems.

Governance and Inclusive Development

Governance quality and institutional readiness significantly influence whether fintech contributes to inclusive economic development or reinforces existing inequalities within digital economies. The rapid expansion of digital financial systems has created challenges for governance structures that often struggle to adapt to technological innovation and evolving financial risks. Avgouleas and Marjosola (2021) emphasize that digital finance requires adaptive governance and regulatory frameworks capable of balancing innovation, supervision, and consumer protection. Brown and Piroska (2022) further argue that fintech governance involves complex regulatory dynamics in which governance systems shape inclusion and exclusion outcomes. In addition, De Paz (2022) highlights that digital economic transformation creates new challenges for financial regulation and institutional adaptation. These findings indicate that governance systems play a critical role in shaping the inclusivity of digital financial systems. Consequently, governance quality becomes a central determinant of inclusive economic development within digital economies.

The literature also emphasizes the importance of broader inclusive development frameworks in understanding the socio-economic implications of fintech transformation. Pouw and Gupta (2017) argue that inclusive development involves multidimensional processes that integrate economic, social, and institutional considerations. Gupta et al. (2015) further emphasize that inclusive development requires attention to structural inequalities and unequal participation within development systems. Schoneveld (2020) additionally highlights the importance of inclusive business and governance models in promoting sustainable and equitable development outcomes. These findings suggest that fintech-driven economic

transformation must be evaluated not only in terms of financial growth but also in relation to broader social inclusion and equity objectives. Therefore, inclusive economic development depends on governance systems that are capable of addressing technological innovation, social inequality, and institutional accessibility simultaneously.

3. | RESEARCH METHOD

This study employs a qualitative Systematic Literature Review (SLR) approach to analyze the relationship between fintech, digital inequality, and inclusive economic development within the digital economy. A systematic literature review enables researchers to synthesize existing academic literature in a structured and transparent manner while identifying conceptual patterns, research trends, and theoretical relationships across diverse studies. Snyder (2019) emphasizes that literature reviews are important for developing broader conceptual understandings and identifying gaps within complex research fields. Similarly, Linnenluecke et al. (2020) highlight that systematic review methodologies improve the rigor and reliability of knowledge synthesis by organizing literature through transparent analytical procedures. Through this approach, the study seeks to provide an integrated understanding of how fintech contributes to economic participation while also generating new forms of inequality and exclusion within digital financial systems. Consequently, the review focuses not only on the opportunities associated with fintech but also on the structural limitations influencing inclusive economic development.

The literature review process follows the PRISMA 2020 framework to ensure transparency, consistency, and methodological rigor throughout the identification and selection of academic sources. Page et al. (2021) emphasize that PRISMA guidelines improve the quality of systematic reviews through structured procedures involving identification, screening, eligibility assessment, and inclusion stages. Academic literature was collected from major scholarly databases, including Scopus, Google Scholar, ScienceDirect, Springer, Emerald, and Taylor & Francis. The search process used combinations of keywords related to fintech, digital inequality, financial inclusion, social exclusion, financial literacy, governance, and inclusive economic development. Inclusion criteria focused on peer-reviewed journal articles, conference papers, institutional publications, and scholarly reports published between 2019 and 2024 that directly addressed fintech and socio-economic inclusion within digital financial systems. Publications focusing exclusively on highly technical financial engineering or unrelated technological systems were excluded from the analysis. This process ensured that the selected literature remained aligned with the objectives and analytical focus of the study.

Following the literature selection process, the identified studies were analyzed using a qualitative thematic synthesis approach to identify recurring themes, conceptual relationships, and patterns related to fintech and digital inequality. Thematic synthesis allows researchers to compare findings across studies while generating broader

analytical interpretations of complex socio-economic phenomena. The selected literature was categorized into several thematic areas, including fintech transformation, financial inclusion, digital inequality, social exclusion, financial literacy, governance challenges, and inclusive development. This classification process enabled the study to examine how different institutional and socio-economic contexts influence participation within digital financial systems. In addition, thematic synthesis facilitated the identification of recurring exclusion mechanisms affecting vulnerable populations such as women, older adults, and digitally marginalized groups. Consequently, the study provides a broader conceptual synthesis rather than isolated summaries of individual studies.

The analytical process further emphasizes the relationship between governance quality, institutional readiness, and unequal participation within fintech-driven economic systems. The reviewed studies were examined not only for their discussion of economic opportunities but also for their analysis of structural inequalities, technological accessibility, financial vulnerability, and governance adaptation. This approach was used to identify how socio-economic disparities and institutional limitations influence the inclusivity of digital financial transformation. Furthermore, the analysis focused on both positive and negative implications of fintech expansion, including increased financial participation, exclusion risks, gender disparities, digital vulnerability, and unequal technological capability. By integrating these dimensions, the study seeks to provide a balanced understanding of the relationship between fintech and inclusive economic development. Therefore, the qualitative SLR approach enables the study to generate broader insights regarding the socio-economic and governance implications of fintech within contemporary digital economies.

4. | RESULTS

The reviewed literature demonstrates that fintech has significantly transformed contemporary economic systems by increasing financial accessibility and accelerating participation within digital economies. Digital financial technologies such as mobile banking, digital payment platforms, online lending services, and fintech applications have enabled individuals and businesses to access financial services more efficiently than traditional financial systems. The literature consistently identifies fintech as an important mechanism for improving financial participation, particularly among populations previously excluded from formal banking systems. In many developing economies, fintech expansion has reduced geographical and institutional barriers that traditionally limited access to financial services. These developments indicate that fintech contributes to broader economic transformation by increasing financial connectivity and supporting economic participation. Consequently, fintech is increasingly associated with inclusive economic development strategies within digital economies.

The findings further reveal that fintech contributes positively to economic participation by supporting entrepreneurship, productivity, and financial accessibility

among underserved populations. Digital financial systems allow individuals and small businesses to participate more actively in economic activities through improved access to transactions, credit, and financial resources. The literature demonstrates that fintech-driven financial inclusion contributes to economic development by enabling greater participation in formal financial systems and improving opportunities for economic mobility. In addition, digital finance supports the expansion of economic activities by increasing efficiency and reducing transaction costs within financial systems. These findings suggest that fintech creates important opportunities for inclusive economic growth through broader financial accessibility and technological integration. However, the literature also indicates that these opportunities are shaped by institutional and socio-economic conditions that influence participation within digital financial ecosystems.

Despite these positive economic contributions, the reviewed studies consistently demonstrate that fintech-driven economic transformation also generates new forms of digital inequality and socio-economic exclusion. Access to fintech services depends heavily on technological infrastructure, digital literacy, financial capability, and socio-economic resources, which are unevenly distributed across populations. Individuals and communities with limited technological access or inadequate financial literacy often face difficulties in participating effectively within digital financial systems. In addition, vulnerable populations such as older adults, women, and economically marginalized groups continue to experience significant barriers to fintech adoption and financial participation. These findings indicate that fintech may simultaneously expand financial inclusion while reinforcing structural inequalities within digital economies. As a result, digital transformation does not automatically produce equitable economic participation across all social groups.

The literature also highlights that digital inequality extends beyond technological access and includes broader issues of financial vulnerability, social exclusion, and unequal participation within digital economic systems. In many contexts, individuals with limited financial capability and digital literacy face greater risks of exclusion and financial instability when interacting with digital financial technologies. Furthermore, gender disparities remain a significant issue within fintech-driven financial systems, particularly regarding access to financial services and economic participation opportunities. These findings suggest that unequal digital capability influences not only access to financial technologies but also the ability to benefit from digital economic transformation. Consequently, fintech-driven inclusion may produce uneven socio-economic outcomes if structural vulnerabilities and demographic disparities are not adequately addressed. Therefore, digital inequality should be understood as a multidimensional issue involving technological, economic, social, and institutional factors simultaneously.

Governance quality and institutional readiness further emerge as critical factors influencing the inclusivity of fintech-driven economic development. The reviewed

literature indicates that governance systems often struggle to adapt to rapidly evolving financial technologies and emerging digital risks. Weak regulatory capacity, inadequate institutional coordination, and limited consumer protection mechanisms may reduce the ability of governance systems to ensure equitable participation within digital financial environments. In addition, governance disparities across countries significantly influence how fintech opportunities and risks are distributed within societies. Countries with stronger institutional readiness and adaptive governance systems are generally more capable of balancing financial innovation with social inclusion and consumer protection objectives. These findings demonstrate that inclusive fintech development depends not only on technological advancement but also on governance effectiveness and institutional adaptation. Consequently, governance quality becomes a major determinant of whether fintech contributes to inclusive or unequal economic outcomes.

5. | DISCUSSION

Overall, the reviewed literature demonstrates that fintech-driven financial inclusion is fundamentally shaped by broader socio-economic and institutional conditions rather than technological innovation alone. While fintech creates important opportunities for economic participation and financial accessibility, unequal technological capability, governance disparities, financial vulnerability, and structural exclusion continue to limit inclusivity within digital economies. The findings indicate that successful inclusive economic development requires integrated approaches that combine financial innovation with investments in digital literacy, technological infrastructure, governance adaptation, and social inclusion strategies. In addition, governance systems must continuously adapt to technological transformation to ensure that fintech expansion does not reinforce existing socio-economic inequalities. These findings suggest that fintech should not be understood solely as a tool for economic modernization but also as a governance-dependent process with complex social implications. Therefore, inclusive digital economic development depends on the ability of governance systems to address inequality, exclusion, and unequal participation within rapidly evolving digital financial environments.

6. | CONCLUSION

This study concludes that fintech has become an important component of digital economic transformation by expanding financial accessibility, supporting economic participation, and increasing opportunities for inclusive economic development. The reviewed literature consistently demonstrates that fintech-driven financial systems contribute to broader participation within formal economic activities through digital financial services such as mobile banking, online lending, and digital payment systems. In addition, fintech enables individuals and businesses to access financial resources more efficiently, particularly in contexts where traditional financial systems remain limited. These developments indicate that fintech plays a significant role in supporting

economic modernization and financial inclusion within contemporary digital economies. However, the findings also demonstrate that the benefits of fintech are not distributed equally across populations and are heavily influenced by broader socio-economic and institutional conditions. Therefore, fintech-driven inclusion should be understood as a conditional and governance-dependent process rather than an automatically inclusive form of economic transformation.

The findings further reveal that digital inequality, financial vulnerability, and social exclusion remain major challenges affecting participation within fintech-driven financial systems. Unequal access to technological infrastructure, limited digital literacy, financial capability disparities, and socio-economic vulnerability continue to restrict participation among marginalized groups such as women, older adults, and economically disadvantaged populations. In many cases, fintech expansion may unintentionally reproduce existing inequalities by favoring individuals and communities with greater technological access and financial capability. These findings indicate that digital transformation alone is insufficient to ensure inclusive economic outcomes. Instead, inclusive economic development requires broader efforts to address structural barriers, demographic disparities, and unequal participation within digital financial ecosystems. Consequently, reducing digital inequality becomes an essential component of sustainable fintech development.

Finally, this study emphasizes that governance quality and institutional readiness are critical determinants of whether fintech contributes to inclusive or unequal economic outcomes. Effective governance systems are necessary to balance financial innovation, consumer protection, technological accessibility, and social inclusion within rapidly evolving digital environments. Policymakers should prioritize investments in digital infrastructure, financial literacy, and inclusive governance frameworks to ensure equitable participation in digital financial systems. In addition, regulatory systems must develop adaptive governance approaches capable of addressing emerging financial risks and unequal technological participation. Future research may further explore comparative regional experiences, demographic inequalities, and long-term socio-economic impacts associated with fintech-driven transformation. By synthesizing existing literature, this study contributes to a broader understanding of how fintech, governance, and digital inequality interact within contemporary digital economies.

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Declaration of Conflicting Interests

The authors declare that there is no conflict of interest.

Ethical Approval and Originality Statement

Ethical approval was obtained for this study. The manuscript represents original work and has not been previously published, nor is it under consideration by another journal.

Data Disclosure Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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