



A Conceptual Framework Extending Media System Dependency (MSD) Theory through Social Media Use Among Gen Z

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Abstract

This study proposes a conceptual framework for extending Media System Dependency (MSD) Theory by introducing Social Media Dependency (SMD) within the context of Gen Z's digital behavior. By integrating perspectives from the social, social media, and entrepreneurial domains, the framework aims to explore the factors that contribute to SMD and its implications for constructive social engagement. A comprehensive literature review across communication studies, digital media research, and entrepreneurship theory was conducted to inform the model. Central to this study is the proposition of an "entrepreneurial domain" as a determining structure within the MSD framework. This system highlights key factors such as entrepreneurial potential, education and entrepreneurial intention that may influence Gen Z's dependency on social media platforms. These factors, while contributing to dependency, may also foster positive outcomes such as civic participation, digital literacy, and innovation, all of which are essential for promoting inclusive dialogue, social harmony, and building peace in an increasingly interconnected world. By viewing SMD not only as a behavioral phenomenon, but also as a potentially constructive force when aligned with entrepreneurial and educational goals, this framework repositions media dependency as a catalyst for global cooperation and peace. The study is conceptual in nature, and proposed hypotheses require empirical validation. It is the first of its kind to examine Gen Z's SMD through a tripartite lens; social, media, and entrepreneurial domains while offering valuable contributions to the evolving literatures of MSD Theory, social media dependency, generational studies, and digital peace-building.

Keywords: Media System Dependency Theory, Social Media Dependency, Social Domain, Social Media Domain, Entrepreneurial Domain, Gen Z.

1.Introduction

The pervasive reliance on smartphones among students today signals a shift from mere habitual use to potentially addictive behavior (Ayandele et al., 2019). Excessive engagement with digital platforms, especially social media, has been linked to negative outcomes such as increased psychological detachment, mental health challenges, and reduced physical well-being (Elhai et al., 2017). Generation Z may be especially vulnerable due to their constant connectivity and digital immersion (Sirolo et al., 2019; Throuvala et al., 2019). Psychological responses such as fear of missing out (FOMO), nomophobia, and behavioral disorders like social media overuse and decreased interpersonal skills are commonly observed (Griffiths et al., 2018; Hou et al., 2019). However, despite these concerns, digital platform when used purposefully hold tremendous potential to support emotional well-being, foster self-expression, and enhance social connectedness. Particularly during crises like the COVID-19 pandemic, digital tools played a pivotal role in uniting communities, reducing isolation, and bridging the digital divide (GSMA, 2020). Across Europe, Central Asia, and Canada as part of the Health Behaviour in School-aged Children (HBSC), examined digital behaviors among adolescents aged 11, 13, and 15 across 44 countries and found over one-third of adolescents reported continuous online contact with friends with the highest rates among 15-year-old girls, girls were more likely than boys to exhibit problematic social media use (13% vs. 9%) and adolescents from high-affluence families showed more intense social media engagement, while those from low-affluence families were more likely to be passive users (Boniel-Nissim et al., 2024).

This digital fluency also provides Gen Z with opportunities to engage in entrepreneurship, build communities, and contribute to economic and social domain that promote global understanding and peace (Ferdous & Huda, 2023; Crittenden et al., 2019). As Gen Z students navigate the digital landscape, especially those pursuing business-related degrees they are uniquely positioned to leverage technology for innovative, ethical ventures that can shape peaceful, inclusive societies. The entrepreneurial domain, as described by Spilling (1996), emphasizes the interdependence between diverse actors, systems, and environmental forces. Social media now plays a central role in shaping this system.



With increasing dependence on social platforms for information and connection, it is vital that Gen Z develop strong digital literacy and social media intelligence (SMIQ) to use these tools ethically and productively (Pinto et al., 2020; Reddy et al., 2020). To explore this evolving relationship between technology, entrepreneurship, and society, this study is grounded in Media System Dependency (MSD) Theory, originally developed by Ball-Rokeach and DeFleur (1976). MSD theory asserts that individuals' use of media is influenced by the dynamic interrelations between the audience, media, and societal systems. Though traditionally applied to mass media, it is now extended to digital communities, social influencers, and interactive platforms (Zhang et al., 2017; Kim et al., 2019). Despite its global relevance, there remains a research gap in applying MSD theory in the Malaysian context particularly among Gen Z digital natives. Few studies have examined how media dependency interacts with the entrepreneurial mindset, social integration, and peace-oriented behaviors of Millennial in Malaysia (Musa et al., 2017; Anuar & Yusuf, 2023). Therefore, this research aims to address that gap and explore how digital dependency when aligned with ethical values can empower youth to become agents of peace and progress in a connected world.

2. Literature review

2.1 Social Media Dependency (SMD) and Gen Z

Terms like social media addiction, compulsive use, and problematic social media engagement often dominate the discourse, highlighting the risk of overuse among Gen Z. These behaviors can manifest as sleep disturbances, aggression, and other mental health challenges (Cao et al., 2020; Chen, 2019). Yet, labeling these behaviors strictly as “addiction” risks overlooking the potential of digital engagement as a skillful, meaningful tool for social advancement (Carbonell & Panova, 2017; Longobardi et al., 2020). This study instead uses the term Social Media Dependency (SMD) to describe both the potentially harmful and constructive reliance on digital platforms. Social media use, when shaped by digital ethics and community awareness, can support psychological well-being, promote empathy, and contribute to peacebuilding and social harmony (Sheldon & Bryant, 2016). However, it can also be used to perpetuate division, cyberbullying, and misinformation. Thus, understanding SMD within a balanced framework is essential for fostering digital citizenship among Gen Z.

2.2 Determinants of Social Media Dependency (SMD)

The social domain comprising networks of support from family, peers, and institution plays a critical role in Gen Z's media behavior. High levels of social support correlate with lower levels of depression and anxiety, emphasizing the role of community in nurturing emotional health (Grey et al., 2020; Qi et al., 2020). In this sense, social domain that encourages positive online engagement can reduce harmful dependencies and cultivate peaceful relationships across digital borders. The social media domain itself enables real-time communication, creative expression, and knowledge sharing. In Malaysia, platforms like Instagram have empowered youth to share stories, advocate for causes, and build inclusive communities (Joyce, 2022). This empowerment can fuel narcissistic behavior if misused, but it can also promote digital altruism where users act for the common good, promote social justice, and foster intercultural understanding. The proposed determinant, entrepreneurial domain brings another dimension to this conversation. Students are not just consumers, they are digital creators, entrepreneurs, and changemakers. Social media enables access to markets, mentorship, and collaboration opportunities that were once inaccessible (Wang et al., 2020; Jagongo & Kinyua, 2013). When coupled with values of empathy, sustainability, and cross-cultural respect, entrepreneurship can be a pathway to peaceful development and global equity. Educational institutions play a vital role in shaping this journey. By aligning curriculum with digital competency and ethical entrepreneurship, they can nurture a generation that uses media to connect rather than divide, supporting institutions that promote dialogue, understanding, and peace (Barrera-Verdugo & Villarroel-Villarroel, 2022).

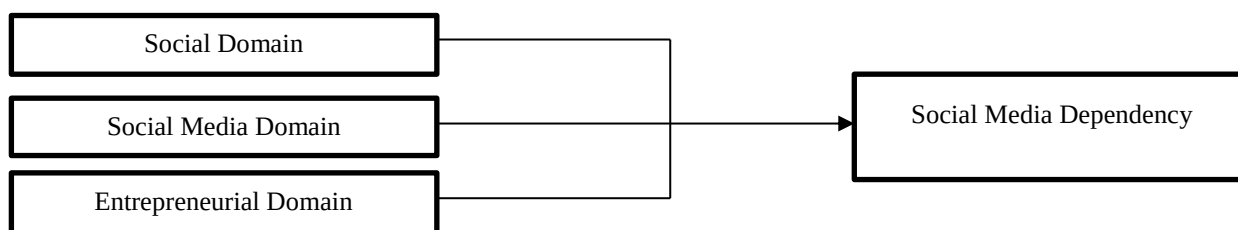
2.3 Media System Dependency (MSD) Theory

MSD Theory provides a holistic framework to understand how individual media dependency is shaped by the interaction between media systems, audience needs, and social context (Ball-Rokeach & DeFleur, 1976). At the micro level, people depend on media to meet personal needs like information, identity, or emotional regulation. At the macro level, societal shifts such as the rise of digital activism or online communities shape the function of media in collective life. MSD theory is particularly relevant in today's digital age where social media alters the boundaries between private and public life. According to Ball-Rokeach (1998), new communication technologies do not revolutionize human behavior but evolve to deepen the interaction between media systems and everyday social structures. In the context of this study, MSD theory helps explain how Gen Z's digital habits are formed not in isolation, but within a larger system of social, educational, and entrepreneurial dynamics. Understanding this interplay is essential if we aim to use digital platforms not just for profit or entertainment, but for peacebuilding, intercultural dialogue, and social transformation. Research in other



countries shows MSD's applicability across fields like environmental communication, marketing, and civic engagement (Boukes, 2021; Zhang & Zhong, 2020). Yet in Malaysia, few studies have explored how digital dependency among Gen Z can become a force for peace, inclusion, and responsible innovation. This study aims to fill that gap.

3. Conceptual Framework



This study adopts Media System Dependency (MSD) Theory as its foundational theoretical framework. According to Ball-Rokeach and DeFleur (1976), MSD theory explains how individuals' reliance on media is shaped by the interplay among three interrelated systems: the social system (society), the media system (media), and the audience (users). In this research, we conceptualize Social Media Dependency (SMD) as the audience response particularly among Gen Zers and propose entrepreneurial domain as a novel, third determinant that influences this dependency. In this context, the social domain encompasses family, peers, and social media influencers. All of whom shape Gen Z's digital behavior through communication norms, emotional support, and modeled online engagement. The social media domain includes social networking sites (SNS) such as Facebook, Instagram, Twitter, YouTube, and messaging platforms like WhatsApp. These platforms allow for interaction across educational, entertainment, and professional domains. The entrepreneurial domain, newly proposed in this study, incorporates entrepreneurial intention, digital entrepreneurship education, and emerging Gen Z entrepreneurs who leverage social media for business innovation, self-branding, and economic empowerment. These three determinants function as the independent variables, with SMD serving as the dependent variable. While SMD has often been associated with addiction and negative behavioral outcomes, recent literature also points to its constructive and transformative potential, especially when media use is intentional, ethical, and socially engaged. Importantly, Gen Z media dependency, when channeled through entrepreneurship, digital literacy, and community building can act as a catalyst for global cooperation and peacebuilding. As digital natives, Gen Z are adept at using social media not only for personal gratification, but also to collaborate, share knowledge, challenge injustices, promote tolerance, and build inclusive digital communities (Schmidt et al., 2024). Thus, this research positions SMD not solely as a risk factor, but also as a potential indicator of positive engagement and peaceful social transformation.

H1: The social domain has a positive relationship with SMD among Gen Z in Sarawak. An active and supportive social system can influence how individuals use and depend on media. Research has shown that peer and family support mitigate problematic internet use among adolescents (Nielsen et al., 2019; Xin et al., 2020). In the context of social media, support from family, friends, and influencers often encourages Gen Z to explore digital platforms for connection, self-expression, and identity formation, fostering a healthier, purpose-driven form of media dependency. When these digital interactions promote mutual respect, empathy, and intercultural understanding, they lay the foundation for peaceful social coexistence in online spaces.

H2: The social media domain has a positive relationship with SMD among Gen Z in Sarawak. Social media platforms serve as vital spaces for identity construction and emotional support. According to Brailovskaia et al. (2020), these platforms provide Gen Z with avenues to build self-esteem and receive validation from their digital communities. Through media functions such as photo sharing, video editing, and real-time engagement (Chou et al., 2019), users form virtual identities that contribute to their psychological well-being and social fulfilment. When used ethically and inclusively, these platforms become tools for digital peacebuilding, where diverse voices can be heard, respected, and uplifted.

H3: The entrepreneurial system has a positive relationship with SMD among Gen Z in Sarawak. Social media has become a central tool for digital entrepreneurship. It offers equal access, interactive engagement, and low barriers to entry—making it especially attractive to Gen Z with entrepreneurial aspirations (Peters et al., 2013). Platforms like Facebook are frequently used by small and medium enterprises for marketing and customer interaction due to their ease of use and reach. Recent studies also highlight the positive influence of social media on entrepreneurial self-efficacy, particularly among women entrepreneurs (Madawala et al., 2023). When young entrepreneurs especially students, collaborate through social media to share knowledge and support, they cultivate digital ecosystems that promote



cooperation, creativity, and inclusive growth (Schmidt et al., 2024). These networks not only enhance business outcomes but also promote shared prosperity, social equity, and peaceful coexistence, aligning with the broader goals of sustainable development and global peace.

4. Significance of Study

This study advances three significances by firstly, in introducing entrepreneurial and peace-oriented intent as new determining systems influencing media dependency by extending the MSD Theory. Next, generational media research is seen by focusing explicitly on Gen Z's digital behaviors in relation to entrepreneurial identity and constructive usage. Then, by conceptualizing SMD as a potential mechanism for global social cohesion rather than exclusively a risk factor indicates digital peace-building scholarship. Practically, the framework can inform educational policy, curriculum design, and digital literacy programs that channel Gen Z's social media usage toward civic and collaborative ends.

5. Research Methodology

Among the four major primary data collection techniques: interviewing, observation, projective methods, and surveys, this study adopts the survey method as its core data collection tool. A self-administered questionnaire will be used to gather insights from university students representing Gen Z at selected Sarawak universities. These students are ideal subjects due to their digital fluency and heavy engagement with social media platforms, which makes them key actors in shaping the future of digital communication, innovation, and peaceful coexistence. Quantitative research will be employed, and data analysis will be conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM), a robust technique appropriate for testing complex models. This method aligns with Hair et al. (2017), who emphasize PLS-SEM as a structured and effective way to test theoretical models involving latent constructs and multiple variables. Descriptive statistics and frequency distribution analyses will be performed to interpret both demographic data and core constructs related to social media use, entrepreneurial activity, and social system engagement. This methodological framework will allow the researcher to assess how digital dependency—when guided by ethical standards—can be a vehicle for digital peacebuilding, innovation, and social good.

6. Discussion

This study proposes the entrepreneurial domain as a new factor influencing Social Media Dependency (SMD), drawing from past empirical findings that indicate a strong correlation between entrepreneurial engagement and social media use (Wu & Song, 2019; Wang et al., 2020; Ferdous & Huda, 2023). University students often use social media not only for entertainment or networking but increasingly as platforms for collaborative innovation, social activism, and ethical entrepreneurship. These platforms allow Gen Z to share ideas, crowdsource solutions to societal challenges, and launch ventures that promote sustainability, diversity, and peacebuilding. The core argument is that Gen Z's dependency on social media is shaped by a triadic interaction of systems: the social system, media system, and entrepreneurial system. Each of these systems contributes to either constructive or maladaptive digital behaviors. The proposed conceptual model introduces six hypotheses based on the influence of these systems on SMD, aiming to explore how social media can be used positively to foster growth, inclusion, and peaceful dialogue. As digital natives, Gen Z tend to immerse themselves in interactive, online spaces where experiences are shaped by collaboration and instant feedback. These environments not only facilitate academic and professional communication (Dron & Anderson, 2014) but also support cross-cultural understanding, peer-to-peer learning, and peaceful online engagement. Through content creation, feedback sharing, and community facilitation, students move beyond passive consumption to become active digital citizens, contributing to a healthier, more peaceful digital environment. By understanding how entrepreneurial motivations drive social media use, institutions and policymakers can empower Gen Z to use these platforms as tools for peace and progress, rather than sources of stress or division. When the social media environment is enriched with value-based communication, it strengthens bonds, promotes inclusive dialogue, and nurtures a global culture of empathy and cooperation.

7. Conclusion

This research proposes a novel conceptual model that integrates the entrepreneurial system into the Media System Dependency (MSD) Theory, thereby expanding its theoretical and practical relevance. Traditionally focused on the dynamic between media and users within a societal framework, MSD is now extended through this study to incorporate entrepreneurship as a driving system influencing digital behavior among Gen Z. This study contributes to theory enhancement by proposing that the entrepreneurial domain is an ecosystem of creativity, innovation, and economic potential. It plays a significant role in shaping SMD. By doing so, the research provides a more nuanced understanding of how positive social media use can emerge when digital interaction is purpose-driven, ethical, and socially constructive. This integration opens new avenues for MSD theory, offering a robust framework to study digital peacebuilding and



social transformation through media dependency. Meanwhile, for educators, marketers, and institutional leaders, the findings of this study offer practical insights into how social media dependency can be managed and optimized. Rather than attempting to reduce social media usage altogether, institutions should promote media literacy, responsible engagement, and entrepreneurial competencies that align with values like respect, empathy, innovation, and global harmony. Understanding what drives Gen Z's social media use allows stakeholders to develop strategies that channel digital dependency into creativity, civic participation, and peaceful collaboration. Looking ahead, research should explore how social media literacy and ethical design can be embedded into curricula across institutions globally. Future studies may examine how Gen Z's digital fluency can be redirected to foster global citizenship, interfaith dialogue, peace education, and sustainable entrepreneurship. As social media continues to evolve, its power as a force for unity and peaceful coexistence must be harnessed. Gen Z, with their entrepreneurial spirit and digital confidence, can become ambassadors of world peace in the digital era. When empowered with the right tools, ethics, and support systems, their intense engagement with social media can move beyond personal gratification and serve as a platform for social good, economic resilience, and intercultural dialogue. In this light, the entrepreneurial use of social media that is fuelled by empathy, digital skills, and responsible innovation, offers a powerful avenue to bridge global divides, promote mutual understanding, and build a more just, inclusive, and peaceful world.

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