

CAUGHT BETWEEN FAMILY AND SCREEN: FAMILY DYNAMICS AND PROBLEMATIC SMARTPHONE USE AMONG GENERATION Z

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ABSTRAK

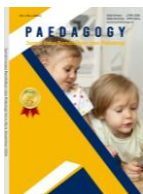
Penggunaan *smartphone* yang bermasalah (PSU) telah muncul sebagai perhatian penting di kalangan remaja dan dewasa muda karena kaitannya dengan berbagai dampak psikologis dan sosial. Tinjauan literatur ini bertujuan untuk mensintesis temuan empiris mengenai hubungan antara dinamika keluarga dan PSU pada Generasi Z. Tinjauan dilakukan melalui basis data Google Scholar, Scopus, dan Taylor & Francis. Dari 2.908 artikel teridentifikasi, sebanyak 21 artikel memenuhi kriteria inklusi dan dianalisis secara tematik. Hasil sintesis mengidentifikasi empat tema utama, yaitu kohesivitas keluarga dan kualitas hubungan, dinamika keluarga disfungsi, mekanisme psikologis, serta kompensasi emosional dan strategi koping. Kualitas hubungan keluarga positif berkaitan dengan tingkat PSU yang lebih rendah. Sebaliknya, disfungsi dan konflik keluarga, *parental phubbing*, kontrol psikologis orang tua, serta pengasuhan negatif berkaitan dengan risiko PSU. Hubungan-hubungan ini dikaitkan dengan faktor psikologis, termasuk kesepian, kecemasan sosial, depresi, ketakutan kehilangan sesuatu, harga diri, pengendalian diri, dan frustrasi atas kebutuhan psikologis. Temuan ini menunjukkan bahwa PSU perlu dipahami sebagai fenomena yang berkaitan dengan kualitas relasi keluarga dan dinamika psikologis. Temuan ini menyoroti potensi relevansi penguatan komunikasi keluarga, dukungan emosional, dan hubungan orang tua-anak dalam upaya mencegah PSU.

Kata Kunci: *Dinamika Keluarga, Generation Z, Problematic Smartphone Use, Adiksi Smartphone*

ABSTRACT

Problematic smartphone use (PSU) has emerged as an important concern among adolescents and young adults due to its association with various psychological and social outcomes. This literature review aimed to synthesize empirical findings on the relationship between family dynamics and PSU among Generation Z. The review was conducted using Google Scholar, Scopus, and Taylor & Francis databases. Of the 2,908 articles identified, 21 met the inclusion criteria and were analyzed thematically. The synthesis identified four main themes: family cohesion and relationship quality, dysfunctional family dynamics, psychological mechanisms, and emotional compensation and coping strategies. Positive family relationships were associated with lower levels of PSU. In contrast, family dysfunction and conflict, parental phubbing, parental psychological control, and negative parenting practices were associated with increased PSU risk. These relationships were associated with psychological factors, including loneliness, social anxiety, depression, fear of missing out, self-esteem, self-control, and psychological need frustration. These findings indicate that PSU should be understood as a phenomenon related to family relationship quality and psychological dynamics. These





findings highlight the potential relevance of strengthening family communication, emotional support, and parent-child relationships in efforts to prevent PSU.

Keywords: *Family Dynamics, Generation Z, Problematic Smartphone Use, Smartphone Addiction*

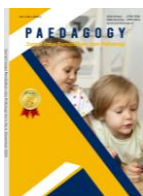
INTRODUCTION

The development of digital technology has made *smartphones* an increasingly integral part of everyday life, particularly among adolescents and young adults who belong to Generation Z. This group has grown up in an environment characterized by high access to digital technology, making smartphones useful not only as a means of communication but also for obtaining information, supporting academic activities, building social relationships, and fulfilling entertainment needs. In Indonesia, the high exposure of young people to digital technology is reflected in the increasingly widespread use of the internet and mobile phones. According to *Statistics of Telecommunication Indonesia 2024*, 72.78% of the Indonesian population accessed the internet in 2024, increasing from 69.21% in 2023. In addition, 68.65% of the Indonesian population owned a mobile phone in 2024, indicating the increasingly strong penetration of digital devices into people's daily lives (Badan Pusat Statistik, 2025). Such intensive use provides various benefits; however, increasingly frequent smartphone use may also develop into *problematic smartphone use* (PSU). PSU refers to a pattern of smartphone use that is difficult to control and potentially interferes with psychological, social, academic, and everyday functioning. This phenomenon warrants attention because problematic smartphone use is associated with various behavioral, psychological, and social aspects and is increasingly recognized as a relevant public health concern (Wang et al., 2025; Giansanti, 2025). Although the terms PSU, *smartphone addiction*, and *smartphone dependence* are often used interchangeably or in closely related contexts in the literature, this study uses PSU as the primary term to describe a pattern of smartphone use that has resulted in functional impairment or difficulty controlling use.

PSU has become increasingly important because uncontrolled smartphone use is associated with various consequences for individual well-being. Research has shown that excessive smartphone use is associated with increased loneliness, anxiety, and psychological distress (Kara et al., 2021). PSU has also been associated with sleep disturbances, reduced academic performance, and various emotional and social problems (Giansanti, 2025; Ma et al., 2023). Several studies have reported a relatively high prevalence of problematic smartphone use among adolescents, although prevalence estimates vary depending on population characteristics, definitions, and measurement instruments. These conditions indicate that PSU should not be understood merely as a matter of the intensity of technology use but rather as a behavior that develops through interactions between individual characteristics and the social environment. Therefore, understanding environmental factors that may increase or reduce the risk of PSU is important, particularly during adolescence and young adulthood, when individuals are still developing self-regulation and patterns of social relationships.

In this context, the family represents an important developmental environment for understanding the emergence of problematic smartphone use. The family is not only a setting in which individuals receive support and have their needs fulfilled but also the primary environment for developing self-regulation, communication patterns, emotional attachment, and ways of coping with stress and problems. The quality of family relationships and interactions can therefore function as either risk or protective factors against various



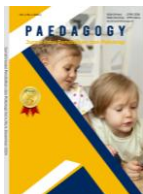


problematic behaviors. Several studies have shown that less adaptive family conditions, particularly family dysfunction and poor family functioning, are associated with an increased risk of addictive internet and digital-device use among adolescents. Adolescents growing up in dysfunctional family environments tend to have a higher risk of internet addiction, and this relationship may also operate reciprocally over time (Wang et al., 2023). Poor family functioning can also predict internet addiction among adolescents, with psychological problems such as anxiety and depression contributing to this relationship (Hu et al., 2022). Conversely, positive family factors, such as attachment and the quality of relationships among family members, may provide protection against problematic smartphone use. Parental involvement, family dynamics, and family attachment are also important external factors in the development of addictive smartphone behaviors (Marini et al., 2022). Furthermore, stronger family cohesion and adaptability are associated with lower levels of mobile phone addiction, whereas family conflict is associated with increased PSU among adolescents (Lian et al., 2023; Sun et al., 2026). These findings indicate that family dynamics should be understood multidimensionally, encompassing relationship quality, interaction and communication, conflict, parental involvement, and supervision of technology use.

These dimensions of family dynamics are reflected in everyday interactions between parents and children. One such form is *parental phubbing*, which occurs when parents focus more on their smartphones than on interactions with their children. This phenomenon has been associated with an increased risk of smartphone addiction among adolescents (Ma et al., 2023), suggesting that patterns of interaction and the quality of parental attention may influence how children use smartphones. On the other hand, the relationship between family factors and PSU is not necessarily unidirectional. Excessive smartphone use may also reduce the quality of family interactions and trigger conflicts between parents and children, particularly concerning rules, frequency, and control of smartphone use (Yang & Zhang, 2021). In such situations, parental mediation through supervision, guidance, and the establishment of rules for digital media use may function as a protective factor against problematic media use among adolescents. However, the effectiveness of such strategies is not always consistent because it may vary depending on the type of mediation employed. Active mediation and certain forms of rule-setting tend to provide benefits, whereas reactive restriction may produce less favorable outcomes (Vossen et al., 2024). Longitudinal findings also indicate that not all forms of parental mediation consistently reduce smartphone use or PSU among adolescents (Huang et al., 2023). Thus, the relationship between family dynamics and PSU may form a reciprocal pattern in which the quality of family relationships and interactions influences the tendency toward problematic smartphone use, while PSU may also alter the quality of family interactions and relationships.

Although various studies have identified associations between family factors and PSU, existing knowledge remains fragmented because previous research has tended to focus on specific aspects, such as *parental phubbing*, parental mediation, parenting styles, family cohesion, or family conflict. These separate approaches have generated important findings but have not fully explained how multiple dimensions of family dynamics collectively constitute risk and protective factors for PSU. Moreover, the relationship between family factors and PSU may be reciprocal, making it insufficient to understand the phenomenon through a unidirectional cause-and-effect framework. This condition highlights the need for a more integrated synthesis of research to map various forms of family dynamics, both negative and





positive, and their associations with problematic smartphone use among adolescents and young adults as developmental groups representing Generation Z. Therefore, this study aims to synthesize and analyze various dimensions of family dynamics associated with PSU and to identify patterns of risk and protective factors in the relationship between family dynamics and PSU. This synthesis is expected to provide a more comprehensive understanding of the role of the family in shaping, maintaining, and reducing problematic smartphone use among Generation Z.

METHODS

The literature review was conducted using three databases: Google Scholar, Scopus, and Taylor & Francis. The search included combinations of English and Indonesian keywords related to family dynamics and *problematic smartphone use* (PSU). The English search terms included “family dynamics,” “family functioning,” “family cohesion,” “adolescents,” “emerging adulthood,” “young adults,” “college students,” “problematic smartphone use,” and “smartphone addiction.” Meanwhile, the Indonesian search terms included “*kohesi keluarga*,” “*fungsi keluarga*,” “*dinamika keluarga*,” “*remaja*,” “*dewasa awal*,” “*mahasiswa*,” “*adiksi smartphone*,” and “*penggunaan smartphone yang bermasalah*.” These keywords were combined using Boolean operators (AND and OR) as appropriate.

The search yielded a total of 2,908 articles, consisting of 1,056 articles from Google Scholar, 5 articles from Scopus, and 1,847 articles from Taylor & Francis. The screening process was conducted using Rayyan AI. After removing 97 duplicate articles, 2,811 articles remained for title and abstract screening. Based on the predetermined inclusion and exclusion criteria, 118 articles were selected for full-text assessment. Following an in-depth evaluation, 21 studies met all eligibility criteria and were included in the final review.

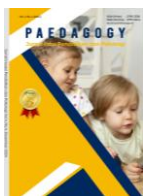
Studies were included if they involved adolescents, students, or young adults aged 14–29 years, corresponding to the operational age range used to represent Generation Z; examined family-related factors, either explicitly or implicitly; measured *problematic smartphone use* or related constructs; employed an empirical quantitative research design; were published in peer-reviewed journals in English or Indonesian; were available in full-text format; and the literature search covered publications from 2015 to 2025. Following the screening process and application of the inclusion and exclusion criteria, 21 studies published between 2018 and 2025 met the eligibility criteria and were included in the final review. Studies were excluded if they did not evaluate family characteristics or *problematic smartphone use*, involved individuals outside the specified age range, were non-empirical studies, had not undergone peer review, or did not provide sufficient methodological information. Eligible studies were compared and grouped into four major themes: family cohesion and relationship quality, dysfunctional family dynamics, psychological mechanisms, and emotional compensation and coping strategies.

RESULTS AND DISCUSSIONS

Results

Analysis of the 21 publications that met the inclusion criteria showed that the relationship between family dynamics and *problematic smartphone use* (PSU) is multidimensional. The research findings not only demonstrated a direct association between family characteristics and PSU but also identified various psychological mechanisms that explain this relationship. In general, the family can function as a protective factor when characterized by cohesion, attachment, harmony, and positive interactions, but it can also become a risk factor when

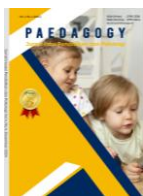




characterized by conflict, dysfunction, *parental phubbing*, and maladaptive parenting patterns. In addition, several studies indicated that smartphone use may serve as a form of emotional compensation or coping strategy when individuals experience loneliness, psychological distress, or unmet emotional needs. Based on this synthesis of findings, four main themes were identified: (1) family cohesion and quality of interaction, (2) dysfunctional family dynamics, (3) psychological mechanisms, and (4) emotional compensation and coping strategies. To provide a more systematic overview of the characteristics of the analyzed studies, including the samples, research focus, and main findings of each publication, the synthesis of the 21 studies is presented in Table 1.

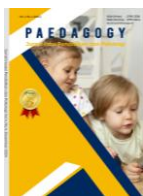
Table 1. Synthesis of Studies on Family Dynamics and PSU

Author & Year	Sample	Focus	Main Findings
Zhen et al. (2019)	4,509 Chinese adolescents	Parent-child relationships and PMPU	Positive parent-child relationships reduced PMPU, both directly and through reduced loneliness.
Hong et al. (2019)	1,721 Chinese students	<i>Parental phubbing</i> and PMPU	<i>Parental phubbing</i> increased PMPU through deterioration in parent-child relationships and self-esteem.
Jimeno et al. (2022)	313 Spanish emerging adults	Attachment, family functioning, and PSU	Family cohesion and functioning, particularly <i>enmeshed</i> family functioning, were important predictors of PSU.
Lin (2023)	714 Taiwanese emerging adults	Phubbing and family cohesion	Phubbing was associated with psychological consequences, whereas smartphone use for affective communication could increase family cohesion.
Niu et al. (2020)	726 Chinese adolescents	<i>Parental phubbing</i> and PMPU	Parent-child relationships mediated the association between <i>parental phubbing</i> and PMPU.
Liu et al. (2020)	1,020 Chinese adolescents	Family dysfunction and smartphone addiction	Family dysfunction increased smartphone addiction through social anxiety.
Xin et al. (2022)	517 Chinese college students	Parental attachment and smartphone addiction	<i>Maternal overprotection</i> increased, whereas <i>paternal care</i> decreased smartphone addiction.
Xu et al. (2025)	20,361 Chinese adolescents	Family risk factors and PSU	Accumulated family risk factors increased the risk of PSU.



Li & Liu (2025)	1,300 Chinese adolescents	Parental psychological control and PSU	Parental psychological control increased PSU, whereas resilience functioned as a protective factor.
Liu et al. (2023)	534 Chinese students	Parental psychological control and PSU	Parental psychological control increased PSU through social anxiety.
Lathiiifah et al. (2023)	219 Indonesian adolescents	Parental structure and psychological control	Parental psychological control predicted increased PSU, whereas parental structure was not significant.
Geng et al. (2021)	1,447 Chinese adolescents	<i>Parental phubbing</i> and PSU	Paternal and maternal <i>parental phubbing</i> were associated with PSU through loneliness and FoMO.
Wang et al. (2024)	2,311 Chinese students	Parent-child relationships and smartphone dependence	Positive parent-child relationships reduced smartphone dependence through self-esteem and self-control.
Yao et al. (2022)	4,299 Chinese adolescents	Parental psychological control and PMPU	Parental psychological control increased PMPU through need frustration and negative affect.
Meng et al. (2025)	9,270 Chinese young people	Parent-child harmony and smartphone addiction	Parent-child relationship harmony reduced smartphone addiction through parental monitoring.
Mi et al. (2023)	780 Chinese junior high school students	<i>Parental phubbing</i> and cohesion	<i>Parental phubbing</i> increased smartphone addiction through reduced parent-child cohesion.
Lin et al. (2023)	456 Chinese adolescents	Harsh parenting and smartphone addiction	Harsh parenting increased smartphone addiction through depression and experiential avoidance.
Qiu et al. (2022)	527 adolescents	Parent-child relationships and smartphone addiction	Positive parent-child relationships reduced smartphone addiction through increased hope.
Lian et al. (2023)	958 Chinese students	Family cohesion, adaptability, and smartphone addiction	Family cohesion and adaptability reduced smartphone addiction both directly and indirectly.





Zhang et al. (2019)	764 Chinese young adults	Parental attachment and PSU	Parental attachment reduced PSU through interpersonal adaptation.
Kim et al. (2018)	3,380 South Korean adolescents	Family environment and smartphone addiction	Domestic violence and parental addiction increased the risk of smartphone addiction.

Table 1 shows that most studies focused on adolescents and young adults, with the majority conducted in China, while studies from Indonesia and South Korea were also identified. The research focused on various aspects of family dynamics, including parent-child relationships, family cohesion and functioning, attachment, *parental phubbing*, psychological control, parenting styles, and accumulated family risk factors. The main findings presented in Table 1 reveal a relatively consistent pattern: positive family relationship quality tends to be associated with lower levels of PSU, whereas negative family interactions and maladaptive parenting patterns tend to increase the risk of PSU. However, these relationships are not always direct, as several studies have demonstrated the roles of psychological mediators and moderators, including loneliness, social anxiety, self-esteem, self-control, FoMO, resilience, and depression. Based on these patterns, the findings were subsequently synthesized into four main themes.

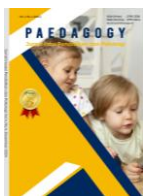
Family Cohesion and Quality of Family Relationships

Problematic smartphone use (PSU) is associated not only with individual characteristics but also with the quality of relationships and cohesion within the family. The findings indicate that parental attachment, positive parent-child relationships, family cohesion, and family adaptability can function as protective factors against PSU. Individuals with more secure attachment and supportive family relationships tend to have a lower risk of problematic smartphone use, whereas unhealthy relationship conditions may increase vulnerability to problematic smartphone use. This pattern indicates that the quality of family interactions represents an important context in shaping individuals' ability to regulate their smartphone use (Jimeno et al., 2022; Qiu et al., 2022; Zhang et al., 2019).

In addition to attachment, harmony in parent-child relationships also contributes to a lower risk of problematic smartphone use. Warm and supportive relationships can provide a sense of security and emotional support, thereby reducing individuals' need to seek relational fulfillment through smartphones. Positive parent-child relationships are also associated with higher self-esteem and self-control, which may subsequently reduce the tendency toward smartphone dependence (Wang et al., 2024). Conversely, excessive parental attention does not always have a protective effect, as *maternal overprotection* has been found to be associated with higher levels of smartphone addiction, whereas *paternal care* shows the opposite relationship (Xin et al., 2022).

At the family-system level, family cohesion and adaptability are also associated with lower levels of smartphone addiction. Families that are able to maintain emotional connectedness while adapting to various changes provide a more supportive environment for the development of individual self-regulation (Lian et al., 2023). However, high cohesion is not always synonymous with healthy family functioning because family functioning characterized by *enmeshment*, which involves excessive emotional involvement and unclear





boundaries among family members, may instead be an important predictor of PSU (Jimeno et al., 2022). Thus, the findings under this theme indicate that the protective factor is not merely the presence of close family relationships but rather the quality and balance of those relationships. This emphasizes that cohesion, attachment, harmony, attention, and family adaptability should be understood as interrelated components in creating a family environment capable of protecting individuals from PSU.

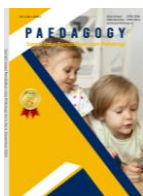
Dysfunctional Family Dynamics

In contrast to positive family relationship quality, which functions as a protective factor, dysfunctional family dynamics consistently emerge as risk factors for PSU. The greater the number of family risk factors experienced by an adolescent, the greater the likelihood of problematic smartphone use. These factors include family dysfunction, disharmonious parental relationships, parental alcoholism, adverse childhood experiences, and other family conditions (Xu et al., 2025). This finding is supported by Kim et al. (2018), who demonstrated that domestic violence and parental addiction were associated with an increased risk of smartphone addiction among adolescents. This pattern indicates that PSU may develop within family contexts characterized by psychological pressure and insufficient emotional support.

Families that do not optimally fulfill their relational functions may also be characterized by low cohesion, recurrent conflict, insecure attachment, and limited parental responsiveness as attachment figures. Such conditions may increase individuals' vulnerability to using smartphones as an alternative source of comfort or social interaction. Uncertainty regarding parental presence and responsiveness may make communication through smartphones feel more comfortable or secure for individuals with insecure attachment (Liu et al., 2020). Thus, family dysfunction is not only directly associated with PSU through family conditions but may also alter how individuals seek security and connectedness.

One form of dysfunctional family dynamics frequently identified is *parental phubbing*. Excessive smartphone use by parents while interacting with their children may generate feelings of neglect, reduce the quality of parent-child relationships, and weaken family cohesion. The deterioration of parent-child interaction resulting from smartphone use that interferes with family interactions may increase adolescents' vulnerability to *problematic smartphone use* (PSU). Longitudinal research has shown that *parental phubbing* is associated with an increased risk of PSU among adolescents (Wang et al., 2023). In addition, *parental phubbing* is associated with deteriorating parent-child relationship quality, which may subsequently contribute to the emergence of problematic internet use among adolescents (Liu et al., 2024). Beyond *parental phubbing*, harsh parenting and parental psychological control are also associated with increased PSU. Harsh parenting involving verbal or physical aggression, as well as psychological control involving guilt induction, withdrawal of affection, emotional manipulation, and restriction of autonomy, may create an interpersonal environment that is less supportive of children's self-regulation development (Li & Liu, 2025; Lin et al., 2023). Research in Indonesia also indicates that parental psychological control is an important predictor of PSU, whereas parental structure does not show a significant relationship with this behavior (Lathiifah et al., 2023). Overall, the findings under this theme demonstrate relatively consistent associations between family dysfunction, *parental phubbing*, psychological control, harsh parenting, and increased vulnerability to PSU.





Psychological Mechanisms

The research findings indicate that the relationship between family dynamics and PSU does not occur entirely through direct pathways but may be explained by various psychological mechanisms. Family conditions can influence individuals' emotional states, self-concept, self-regulation abilities, and psychological resources, which subsequently relate to their tendency to engage in problematic smartphone use. Thus, family factors can be viewed as an initial context that influences psychological processes before these processes are ultimately reflected in smartphone-use behavior. Several studies have consistently identified social anxiety, loneliness, depression, self-esteem, self-control, psychological need frustration, and resilience as mechanisms that mediate this relationship.

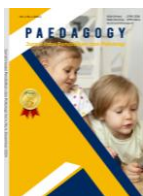
Social anxiety represents one of the mechanisms explaining the relationship between negative family dynamics and PSU. Family dysfunction and parental psychological control can increase social anxiety, which is subsequently associated with increased PSU (Liu et al., 2020; Z. Liu et al., 2023). This condition indicates that negative interpersonal experiences within the family may increase individuals' emotional vulnerability and encourage smartphone use as a means of reducing social discomfort. In addition to social anxiety, negative parenting patterns are associated with depression, basic psychological need frustration, and negative affect, which are subsequently related to increased problematic smartphone use (Geng et al., 2021; Lin, 2023; Yao et al., 2022).

Conversely, positive family relationships can strengthen psychological resources that function as protective factors. Warm parent-child relationships are associated with higher self-esteem, while parent-child relationship quality may also reduce smartphone dependence through increased self-esteem and self-control (Hong et al., 2019; A. Wang et al., 2024). Positive family relationships are also associated with greater hope, life satisfaction, interpersonal adaptation, self-regulation, and resilience, all of which are related to lower levels of PSU (Li & Liu, 2025; Qiu et al., 2022; Zhang et al., 2019). These findings indicate that the family reduces PSU risk not only through direct interactions but also by strengthening individuals' psychological capacities to cope with stress and regulate smartphone-use behavior.

Overall, the psychological mechanisms underlying the family-PSU relationship indicate two opposing pathways. The first begins with negative family dynamics and proceeds to increased emotional vulnerability and weakened psychological resources, thereby increasing the risk of PSU. The second originates from positive family relationships that strengthen self-esteem, self-control, hope, resilience, and adaptive capacity, thereby reducing PSU risk. Thus, psychological mechanisms help explain why similar family characteristics may result in different levels of PSU vulnerability among individuals. These findings demonstrate that the relationship between family and PSU is a complex process that cannot be explained solely by the presence or absence of particular family factors.

Emotional Compensation and Coping Strategies

The findings further indicate that smartphones may be used as a means of emotional compensation and as a coping strategy when individuals experience psychological distress or unmet social needs. In the context of less supportive families, smartphones may serve as an alternative medium for obtaining social connectedness, reducing loneliness, or diverting attention from unpleasant experiences. Such use may initially provide comfort or help individuals cope with negative emotions, but excessive use may develop into a problematic



pattern. Therefore, the use of smartphones as a coping mechanism represents one pathway linking family experiences to PSU.

Loneliness is one condition that may encourage smartphone use to fulfill social relationship needs. The findings indicate that poor parent-child relationships may be associated with increased loneliness, which subsequently motivates individuals to establish relationships or escape from unpleasant psychological conditions (Zhen et al., 2019). Loneliness is also associated with *fear of missing out* (FoMO), which may encourage individuals to increase smartphone use to maintain connectedness with their social environment and obtain information about other people's activities (Geng et al., 2021). This pattern suggests that smartphones may function as a compensatory medium when individuals perceive insufficient social connectedness within their immediate environment.

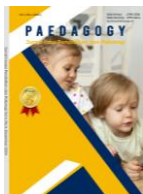
In addition to loneliness, depression and experiential avoidance provide further explanations for smartphone use as a form of coping. Negative parenting patterns may be associated with increased depression and experiential avoidance, which are subsequently related to a tendency toward problematic smartphone use (T. T. C. Lin, 2023). Under such conditions, smartphones may be used to divert attention from unpleasant emotional experiences or as a temporary means of obtaining comfort. However, increasingly frequent smartphone use as a strategy for avoiding distress may reinforce maladaptive patterns of use. Thus, emotional compensation and coping strategies indicate that PSU is associated not only with how frequently smartphones are used but also with the underlying psychological functions of such use.

Discussion

The literature review findings indicate that family dynamics constitute an important context associated with *problematic smartphone use* (PSU) among adolescents and young adults. Positive family relationships, including secure attachment, harmonious parent-child relationships, family cohesion, and family adaptability, tend to be associated with lower levels of PSU. In contrast, conflict, psychological control, harsh parenting, domestic violence, and family dysfunction are associated with a higher risk of PSU. These findings indicate that the family serves a dual function, acting both as a source of protection and as a source of vulnerability in the development of smartphone use behaviors. Thus, PSU is not solely related to an individual's ability to regulate technology use but is also influenced by the quality of the relational environment in which the individual develops.

This pattern is consistent with Attachment Theory, which positions relationships with attachment figures as fundamental to the development of security, emotional regulation, and interpersonal competence. Positive parent-child relationships, *parental attachment*, and family cohesion have been found to be associated with lower levels of PSU (Zhen et al., 2019; Jimeno et al., 2022; Meng et al., 2025; Qiu et al., 2022; Xin et al., 2022; Zhang et al., 2019). Conversely, *preoccupied attachment* may increase vulnerability to PSU when individuals experience insecurity in family relationships (Jimeno et al., 2022). These findings suggest that families capable of providing a sense of security may reduce individuals' need to seek comfort, attention, and connectedness through smartphones. Accordingly, the protective function of the family primarily lies in the quality of emotional connectedness that enables individuals to develop more adaptive self-regulation and interpersonal relationships.





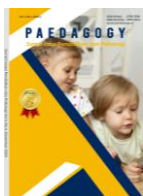
Findings regarding family cohesion indicate that closeness among family members does not always produce positive outcomes when it develops into excessive emotional involvement. Jimeno et al. (2022) showed that *enmeshed family functioning* may be associated with increased PSU through *preoccupied attachment*, whereas Lian et al. (2023) found that family cohesion and adaptability were associated with lower levels of smartphone addiction. These contrasting findings suggest that healthy family functioning requires a balance between emotional connectedness and individual autonomy. Bowen's Family Systems Theory helps explain this condition by viewing individual behavior as part of an interconnected family interaction system. From this perspective, individuals cannot be understood independently of their relational context because emotional processes and relationship patterns within the family can influence how individuals function and respond to their interpersonal environment (Brown & Errington, 2024). Accordingly, both insufficient connectedness and excessive family involvement may hinder individual development. Therefore, a balance between emotional support and independence represents an important characteristic of a family environment that protects against PSU.

Negative family interactions, particularly *parental phubbing*, represent another consistently identified risk pattern. Hong et al. (2019) demonstrated that *parental phubbing* may increase PSU through changes in parent-child relationships and self-esteem, while Niu et al. (2020) found that the parent-child relationship mediates this association. A similar pattern was identified by Geng et al. (2021), who demonstrated the roles of loneliness and FoMO, and by Mi et al. (2023), who identified reduced parent-child cohesion as one pathway underlying this relationship. These findings suggest that parental smartphone use becomes problematic when it reduces the quality of parental presence and attention during family interactions. Thus, smartphone use within the family is inherently relational because the digital behaviors of parents and children are embedded within the same interactional system. Understanding PSU therefore requires more than a focus on children's behavior; it should also consider parents' technology-use patterns and the quality of interactions they establish with their children.

In addition to interaction quality, family dysfunction and negative parenting practices contribute to greater vulnerability to PSU. Kim et al. (2018) associated domestic violence and parental addiction problems with an increased risk of *smartphone addiction*, whereas Xu et al. (2025) demonstrated that the accumulation of multiple family risks was associated with increased PSU. At the parenting level, *psychological control* has been associated with PSU, whereas parental structure does not always show a significant relationship (Lathiifah et al., 2023). These findings suggest that the primary issue is not simply the presence of family rules but rather how such control is implemented and experienced by individuals. Control perceived as psychological pressure may hinder the development of autonomy and emotional regulation, making individuals more likely to seek alternatives for reducing psychological discomfort. Thus, the greater the complexity of pressure experienced within the family, the greater the likelihood that individuals will experience difficulties in managing emotions and developing adaptive smartphone-use patterns.

The influence of control and parenting patterns can be understood through Self-Determination Theory, which emphasizes the importance of fulfilling the needs for autonomy, competence, and relatedness (Ryan & Deci, 2002). Li and Liu (2025) demonstrated that *psychological control* was associated with PSU through *psychological reactance*, while *resilience* could reduce this negative influence. Yao et al. (2022) likewise found that





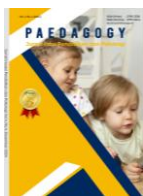
psychological control was associated with PSU through psychological need frustration and negative affect, whereas Lin et al. (2023) identified pathways involving depression and *experiential avoidance*. These findings indicate that the influence of family factors on PSU does not always occur directly but may first affect individuals' psychological conditions. When psychological needs are unmet and emotional pressure increases, smartphones may become an easily accessible means of obtaining distraction, entertainment, or a sense of belonging. Therefore, fulfilling psychological needs within the family environment is an important factor that may determine whether smartphone use develops adaptively or becomes problematic.

These psychological mechanisms are further supported by findings concerning loneliness, social anxiety, depression, negative affect, and FoMO as conditions associated with increased PSU. Geng et al. (2021) demonstrated the roles of loneliness and FoMO, while Liu et al. (2020) found that social anxiety mediated the relationship between family dysfunction and *smartphone addiction*. Liu et al. (2023) similarly demonstrated the role of social anxiety in the relationship between *psychological control* and PSU. Conversely, self-esteem, hope, *self-control*, interpersonal adaptation, and *resilience* may serve as protective resources (Hong et al., 2019; Qiu et al., 2022; Wang et al., 2024; Zhang et al., 2019; Li & Liu, 2025). This pattern indicates that the influence of family factors is better understood through their capacity to shape and strengthen individuals' psychological resources. Consequently, similar family experiences do not necessarily result in the same level of PSU because individuals' responses to pressure and their capacity to regulate emotions also determine their level of vulnerability.

This pattern can further be understood through Compensatory Internet Use Theory (Kardefelt-Winther, 2014), which explains that technology use may be related to individuals' attempts to alleviate unpleasant psychological experiences. Zhen et al. (2019) demonstrated an association between loneliness, *escapism*, and problematic smartphone use, while Geng et al. (2021) identified loneliness and FoMO as important mechanisms. These findings indicate that smartphones may acquire a compensatory function when individuals experience emotional distress or feel insufficiently connected to their social environment. However, this does not necessarily mean that smartphones are consciously used as a coping strategy. Rather, a compensatory function may emerge when technology use becomes a repeated means of diverting attention from or reducing psychological discomfort. When this pattern persists, use that is initially adaptive in the short term may develop into behavior that is difficult to control and ultimately increase the risk of PSU.

Overall, the synthesis of 21 studies demonstrates that the relationship between family dynamics and PSU operates through the interaction of relational and psychological factors. Supportive families may provide protection through secure attachment, harmony, balanced cohesion, and support for psychological needs, whereas *parental phubbing*, psychological control, harsh parenting, conflict, and family dysfunction may increase vulnerability to PSU. These influences may subsequently be strengthened or weakened by psychological conditions such as loneliness, social anxiety, depression, FoMO, self-esteem, hope, *self-control*, and *resilience*. These findings emphasize that preventing PSU should not focus solely on limiting smartphone use duration but should also address the quality of family relationships and individuals' psychological capacities. Accordingly, efforts to promote healthy technology use should focus on creating supportive family environments that establish adaptive boundaries, respect individual autonomy, and help adolescents and young adults develop healthier ways of meeting their emotional and social needs.





CONCLUSIONS

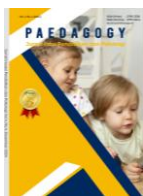
This literature review demonstrates that family dynamics play an important role in shaping both vulnerability and protection against *problematic smartphone use* (PSU) among adolescents and young adults as developmental groups representing Generation Z. The quality of parent-child relationships, attachment, family harmony, and healthy family cohesion tend to function as protective factors, whereas *parental phubbing*, psychological control, harsh parenting, conflict, and family dysfunction are associated with an increased risk of PSU. The synthesis further indicates that the influence of family factors does not operate in a simple or consistently direct manner but may occur through psychological mechanisms such as loneliness, social anxiety, depression, FoMO, psychological need frustration, self-esteem, hope, *self-control*, and *resilience*. These findings suggest that PSU should be understood as a phenomenon situated at the intersection of the relational environment and individual psychological conditions. Therefore, prevention efforts should not focus solely on restricting smartphone use but should also strengthen the quality of family relationships, fulfillment of psychological needs, and self-regulation capacities.

The limitations of this review include the use of only three databases, the restriction of publications to the most recent ten-year period, the operational age range of 14–29 years to represent Generation Z, and the predominance of studies from Asian contexts, particularly China. Therefore, generalization of the findings to other cultural contexts and age groups should be approached with caution. In addition, variations in constructs, measurement instruments, research designs, and sample characteristics across the reviewed studies mean that the relationship between family dynamics and PSU cannot yet be understood as a uniform causal relationship. Future research should expand database coverage and geographical contexts, employ longitudinal or experimental designs, and examine models that simultaneously integrate family factors, psychological mechanisms, and individual characteristics. The development of interventions should also emphasize family-based approaches that extend beyond regulating smartphone-use behavior to strengthening communication, attachment, emotional support, autonomy, and self-regulation, thereby fostering healthier and more adaptive patterns of technology use.

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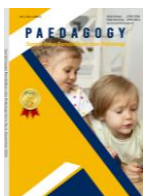
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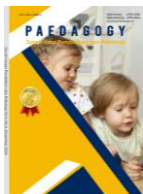
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