

Perceived Parenting Styles as Predictors of Internet Addiction: A Systematic Review

Qi Rui, Zakiah Binti Mohamad Ashari

Faculty of Educational Sciences and Technology, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia

DOI: <https://doi.org/10.47772/IJRISS.2026.100500588>

Received: 12 May 2026; Accepted: 18 May 2026; Published: 08 June 2026

ABSTRACT

The gradual development of technology has led to large-scale internet addiction globally, especially among children and adolescents. In this context, investigation of the relationship between perceived parenting styles and internet addiction in children and adolescents is relatively innovative. This is because of the diversity in outcomes for various perceived parenting styles and their influence on psychological, physiological, and social aspects of development. The purpose of this systematic review is to identify the various perceived parental styles and establish the association between perceived parental styles and risks of IA by providing recommendations for future research and interventions. This study conducted a systematic literature review following the PRISMA guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). A total of 120 articles were selected out of which 20 were found eligible for this review.

The results revealed that perceived parenting styles exerts a significant and differential influence on IA risk in children and adolescents. Authoritative parenting consistently emerges as protective, while non-authoritative styles confer varying degrees of risk. Findings carry implications for parental education programmes and IA prevention strategies. Therefore, this study offers epidemiological evidence to prove that parental style has a significant impact on the prediction of internet addiction in children and adolescents.

Keywords: perceived parenting styles; internet addiction; children; adolescents; systematic review; Baumrind

INTRODUCTION

The rapid proliferation of digital technology has fundamentally transformed the everyday lives of children and adolescents worldwide. Internet Addiction (IA) — an umbrella term encompassing problematic internet use (PIU), online gaming disorder, and smartphone overuse — has emerged as a significant public health concern, associated with obsessive-compulsive behavioural patterns and impairments across social, cognitive, and physiological domains (Lozano-Blasco et al., 2022). Epidemiological evidence indicates that the prevalence of PIU among Chinese adolescents may be as high as 72% (Kokka et al., 2021), while the average daily screen time among young people globally has been reported to exceed seven hours (Bickham, 2021). The severity of internet gaming disorder is now formally recognised in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013), underscoring the clinical relevance of IA as a developmental risk factor. Prolonged and unregulated internet use has been associated with disrupted circadian rhythms, nutritional irregularities, hormonal imbalances, and elevated propensity for risk-taking behaviours (Sami et al., 2018).

Understanding the psychosocial determinants of IA is essential for the design of effective prevention and intervention strategies. Among these determinants, parenting styles has been identified as a particularly influential factor during the developmental years of childhood and adolescence. Family conflict and dysfunctional parent-child communication have been shown to increase children's reliance on online platforms as a substitute source of emotional support and social navigation (Faltýnková et al., 2020). This dynamic is consistent with the Problematic Behaviour Theory, which posits that deficits in social support systems and parental supervision constitute significant risk factors for IA development (Qi et al., 2022). Conversely, positive

and warm parent-child relationships—particularly between mother and child—have been associated with reduced internet use among secondary school students (Shek et al., 2019), suggesting that effective parental behavioural guidance supports the development of self-regulation and impulse control in adolescents.

Perceived parenting styles refers to the child's subjective interpretation of parental behaviours, attitudes, and emotional interactions (Stavoulaki et al., 2021), and is theoretically distinct from objective parenting behaviour. Children's perceptions of parenting, rather than parenting practices per se, are understood to be the more proximal determinant of psychological and behavioural outcomes (Nielsen et al., 2019). Parental mediation of internet use — ranging from co-use and active guidance to monitoring and restrictive regulation — represents one domain through which parenting style manifests in the digital context (Nielsen et al., 2019). However, Steinfeld (2021) cautions that overly restrictive mediation may be counterproductive, potentially increasing rule-breaking behaviour and covert internet use in adolescents. An optimal parenting approach therefore involves a calibrated balance between clear boundaries and emotional responsiveness.

Purpose of this review

The family environment, and perceived parenting style in particular, has been identified as a key modifiable risk factor for IA; yet the evidence base on the specific relationships between each of the four established parenting styles and IA risk has not been systematically synthesised. This review addresses that gap. The purpose of this systematic literature review is to consolidate existing evidence on perceived parenting style as a predictor of internet addiction in children and adolescents, with a view to informing parental education programmes, school-based prevention strategies, and future research priorities.

Three research objectives and corresponding research questions guide the review:

RO1: To examine and characterise the different perceived styles of parenting as represented in the literature.

RQ1: What are the characteristics of different perceived parenting styles?

RO2: To identify the associations between each perceived parenting style and the risk of developing internet addiction in children and adolescents.

RQ2: What is the association between varied parenting styles and the risk of internet addiction in children?

RO3: To examine the mechanisms through which perceived parenting style influences internet addiction risk and to identify avenues for future research.

RQ3: How does perceived parenting styles influence the risk of internet addiction?

METHODOLOGY

This study employed a Systematic Literature Review (SLR) methodology in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. To synthesise findings from the included studies, a qualitative thematic analysis was conducted. Data were systematically extracted and coded according to predefined themes aligned with the research objectives. This approach is well-suited to the present study, as qualitative analytical strategies effectively capture the psychological dimensions underlying participants' practices and behavioural outcomes, thereby facilitating more in-depth and clear interpretations (Maxwell, 2021). Data sources consisted of secondary materials, including peer-reviewed academic journals, empirical research articles, and grey literature, all of which were rigorously screened to ensure relevance to the research field.

Exclusion Inclusion Criteria

The inclusion criteria selected to conduct this study which exclusively includes articles with the following characteristics: i) The selected articles were published between January 2013 and December 2023; ii) children and adolescents were considered ; iii) all articles were full text; iv) published in English; v) include the

prevalence of internet addiction/problematic internet use among children and adolescents ; vi) include an analysis pertaining to perceived parental styles; and vii) utilize a validated instrument. Therefore, this study also excludes studies with the mentioned characteristics: i) not published studies from 2013–2023; ii) children and adolescents below 5 years were not considered; iii) contain only abstracts; iv) studies published in other languages than English; v) validity of the data cannot be extracted

Search Strategy

Comprehensive screenings of academic databases are required for conducting a systematic review. Utilization of two or more databases is crucial to avoid the bias resulting from a single database (Kraus et al., 2022). Relevant academic databases including Scopus, Web of Science, and Google Scholar have been thoroughly investigated to retrieve viable papers. Keywords allow machine learning and text-mining procedures by databases to yield impactful citations and help scholars analyze further relevant data (Kraus et al., 2022). Therefore, an extensive search was conducted to find relevant articles related to Internet addiction and published between January 2013 and December 2023 in the selected electronic databases using the following combination of search terms and their derivatives: ("parenting" OR "parenting style") AND ("internet addiction" OR "compulsive internet use" OR "problematic internet use" OR "excessive internet use" OR "pathological internet use") AND ("students" OR "children" OR "adolescent"). Additionally, articles relevant to the topic were manually searched.

Selection Criteria

Studies identified through the database search were screened in two stages. First, titles and abstracts were reviewed against the inclusion and exclusion criteria. Second, full texts of potentially eligible studies were retrieved and assessed. All screening decisions were recorded in Microsoft Excel. The complete study selection process is documented in the PRISMA flow diagram (Figure 1).

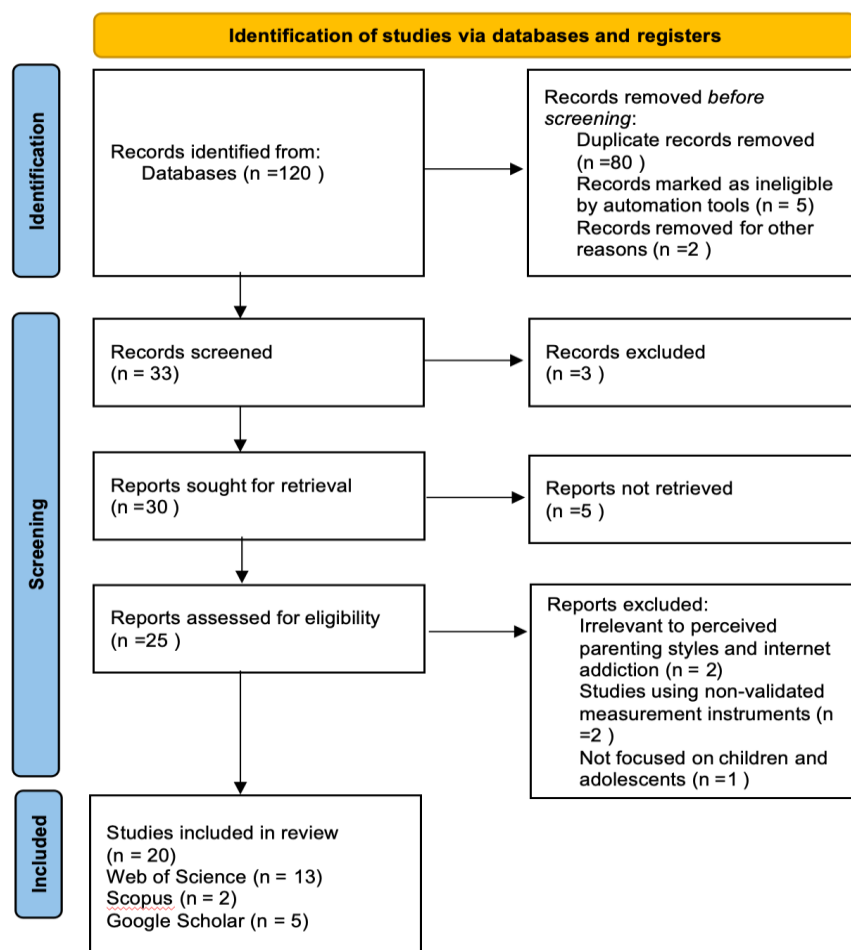


Figure 1: PRISMA flow diagram

Data extraction

20 papers were selected from the databases following the exclusion-inclusion criteria, and examined for sample size, research design, findings, and implications. The data was recorded and tabulated for further analysis.

Data Analysis

The qualitative data was thematically analyzed to detect common emerging themes and similarities. According to Kraus et al. (2022), scholars intend to conduct thematic analysis from a qualitative point to organize the information into themes on a subjective basis. Following this rule, a thematic analysis was recorded for this systematic review, and data was recorded in a tabular form. Thereafter a separate column for data extraction was constructed to color code the commonness in emerging themes and further analyzed for substantial findings. The PRISMA guidelines and Critical Appraisal Skills Programme (CASP) were used to evaluate the validity and feasibility of the entire study (Costa et al., 2024). The CASP appraisal was applied across three domains: (1) internal validity, encompassing clarity of research aims, appropriateness of research design, and rigour of data collection procedures; (2) reliability of findings, including the use of validated measurement instruments for both parenting style and internet addiction; and (3) relevance, assessed by the extent to which findings were applicable to the review's objectives concerning children and adolescent populations. Each of the 20 included studies was independently appraised against these criteria and assigned an overall quality rating (high, moderate, or low). Of the 20 studies, 13 were rated as high quality, 6 as moderate quality, and 1 as low quality. The low-quality study was retained given that its findings were corroborated by higher-quality sources and its exclusion would not have altered the thematic conclusions; however, its limitations are noted where relevant in the discussion. No studies were excluded solely on quality grounds; nevertheless, methodological limitations identified during critical appraisal are addressed in the limitations section of this review. In-depth thematic analysis of perceived parenting styles yielded meaningful insights into patterns of internet addiction among children and adolescents.

RESULTS

We combined a total of 120 studies that were retrieved from the databases (Scopus, Google Scholar and Web of Science). Initially, prior to title-and-abstract screening, 80 duplicate records were removed, 5 records were excluded by automated screening tools, and another 2 records were eliminated for other reasons, leaving 33 records for preliminary screening.

During title-and-abstract screening, 3 irrelevant records were excluded, and 30 full-text articles were therefore sought for retrieval. Among these, 5 articles were inaccessible, and the remaining 25 full-text studies were assessed for eligibility. In the full-text screening stage, 5 studies were excluded based on predefined inclusion and exclusion criteria: 2 studies were irrelevant to the relationship between perceived parenting styles and children's internet addiction, 2 adopted non-validated measurement instruments, and 1 study did not focus on child and adolescent populations.

Ultimately, 20 eligible studies were included in the present systematic review, comprising 13 from Web of Science, 2 from Scopus, and 5 from Google Scholar.

The aims of the study, research design, sample size, main findings, and investigative implications have been produced in Table 1. Subsequently, the emerging themes have been color-coded for common patterns in Table 2.

Table 1: Key Findings from Selected Articles

Author and Year	Aim of the Study	Research Design	Sample size	Main Findings	Research Implications	Emerging themes
Sun and Wilkinson (2020)	Role of parenting styles on controlling internet addiction	Research Article	N= 1200 participants	Children addicted to the internet were typically characterised by dysfunctional parent-child relationships	Extent of internet inclination is a measure of characteristics of various parenting styles	Characteristic Features of Diverse Perceived Parenting Styles
Setiawati et al. (2021)	To investigate the effect of authoritarian and permissive parenting on IA	Observational study	114 Indonesian adolescents aged 12-15	IA is increased with permissive and authoritarian parenting styles	Regulation of permissive and authoritarian parenting in the prevalence of IA	Characteristic Features of Diverse Perceived Parenting Styles
Lukavska et al. (2020)	Aims to examine the effectiveness of parenting styles on PIU	Research Article	1019 Czech students from the ninth grade	A combination of paternal neglectful parenting and maternal authoritarian style increases PIU rates	Influence of perceived parental styles in modulating IA risk factors	Characteristic Features of Diverse Perceived Parenting Styles
Lo et al. (2020)	To study the regulation by permissive parenting style on IA	Research study	227 fourth and fifth graders in Hong Kong	Worry and IA are positively related when PPS is implemented, perceived as neglectful	Lack of boundaries and discipline enhances the risk of IA.	Characteristic Features of Diverse Perceived Parenting Styles
Yang & Kim (2021)	To study the association between work-family conflict and PIU and parenting styles	Cross-sectional Study	707 participants	Negative correlation between authoritative parenting and PIU	Intervention strategy for parenting behavior to reduce PIU in children	Impact of perceived parental style on the risk of IA
Karaer & Akdemir (2019)	To study the effect of perceived social support, parental attitude, and regulation of emotions in IA	Research study	N=174, out of which 40 were included in the experimental study	Low emotional availability in parents of IA adolescents	The absence of parental supervision is an aggravating factor of IA.	Characteristic Features of diverse PPS
Serna et al. (2023)	To study the relationship between four parenting styles and online gambling addiction	Research study	N = 512 adolescents ranging from 16-21 years	Authoritarian parenting is an evident risk factor for IA and online gambling	Influence of perceived parenting on predisposition towards IA.	Correlation between PPS and risk of IA in adolescents and children.
Sun (2023)	To study the role of co-parenting patterns for IA in	Research Study	N=695 participants	Internet addiction and co-parenting are strongly	Association between IA risk and perceived parenting styles	Correlation between perceived parenting styles and risk

	Chinese young people			correlated with each other		of IA in adolescents and children.
Chen et al. (2020)	Significance of time management tendency in adolescents, and the relationship between Internet gaming disorder and parental styles	Research Study	N = 357 Chinese high school students	IA is elevated due to overprotection and rejection from parents	Likelihood of IA amongst certain parental style	Correlation between PPS and risk of IA in adolescents and children.
Aziz et al. (2022)	To identify the relationship between interactions with family and IA	Research Article	N = 165 participants	Authoritative parents showing assertive interaction have “at-risk” children, not extremely addicted	Characteristic properties of interactions for various perceived parental styles	Correlation between PPS and risk of IA in adolescents and children.
Yaffe & Seroussi, (2019)	To study the relationship between parenting styles and internet addiction	Research article	N = 180 participants	Authoritarian parenting is the predictor of internet addiction, authoritative parents control PIU	Role of parental styles in alleviating the risk of PIU	Impact of perceived parental style on risk of IA.
Jeon et al. (2021)	To study the mechanism behind PPS in preventing maladaptive gaming behaviors	Research article	N = 778 participants	Adolescent satisfaction is a function of self-control in online gaming behaviors regulated by a supportive positive parenting styles	Parental styles are influential in accelerating self-control against online addictive activities	Impact of PPS on risk of IA.
Niu et al., (2023)	To examine the relationship between different parental style and internet addiction	Research article	N = 40,597 participants	Warm and close parent-child relationships result in minimum PIU	Characteristics of parental behavior are responsible for mediating the adverse effects of problematic internet use	Impact of PPS on risk of IA.
Özgür (2019)	To study the impact of parenting styles on the usage of the internet and technology by children	Research Study	N=1336	Authoritarian and authoritative parenting styles are effective in declining the dependency of adolescents on online platforms	Parental style and their association with online malpractices	Impact of perceived parental style on risk of IA.
Agbaria & Bdier. (2021)	To examine the relationship between parenting styles and self-	Research article	N = 500 participants	Indicators of IA are highlighted by authoritarian and permissive parenting styles	Parenting style as an indicator of IA risk in adolescents	Impact of perceived parental style on the risk of IA

	efficacy in mediating IA					
Karababa (2020)	Significance of parenting styles in internet addiction in adolescents	Research Article	N = 382 parents	Warm and positive parenting negatively modulate IA in adolescents	Association between perceived parenting styles and reduced risk of IA in adolescents	Correlation of perceived parenting style and risk of IA in adolescents and children
Wong & Kong (2020)	To examine the different parenting styles in the pro-social behavior of children and adolescents	Review	N= 174 children and adolescents	Pro-social behavior is positively correlated to an authoritative parenting style	Investigating the characteristics of perceived parenting styles	Correlation of perceived parenting styles and risk of IA in adolescents and children
Li et al. (2022)	To find out the high-risk internet behaviors against perceived parental styles	Research study	N = 3049 adolescents of 15 years	Low overprotective and high parental care decrease the risk of Internet gaming disorder but increase smartphone overuse in adolescents	Modulation for varied perceived parental styles in determining the risk of behaviors related to IA.	Impact of perceived parental style on the risk of IA
Horita et al. (2022)	To study the relationship between parenting styles and degree of IA.	Research Study	N=600 participants	Teenagers tend to develop IA in authoritarian parenting styles	Parenting styles are influential in enhancing the risk of IA in adolescents	Impact of perceived parental style on the risk of IA
Onyekachi et al. (2022)	To investigate the relationship between social anxiety caused by internet addiction and parenting styles	Research Study	N=300	Authoritative parenting shows reduced PIU whereas highest PIU amongst children with permissive parents	Perceived parenting styles are differently characterized by adverse effects of IA	Impact of perceived parental style on the risk of IA

Table 2: Emerging Themes and Corresponding Articles

Emerging themes	Scholarly articles
Features of Diverse Perceived Parenting Styles	Sun and Wilkinson (2020), Setiawati et al. (2021), Karaer & Akdemir (2019), Aziz et al. (2022), Niu et al. (2023), Onyekachi et al. (2022), Wong and Kong (2020)
Correlation Between Perceived Parenting Styles and Risk of IA in Adolescents and Children	Lo et al. (2020), Sun (2023), Chen et al. (2020), Jeon et al. (2021), Özgür (2019), Karababa (2020), Lukavska et al. (2020)
Impact of Perceived Parenting Styles on Risk of IA	Agbaria & Bdier (2021), Yaffe & Seroussi, (2019), Yang & Kim (2021), Serna et al. (2023), Horita et al. (2022), Li et al. (2022)

Preliminary research findings

Different standardized instruments were employed to measure the perceived parenting styles, which included observational methods, and self-report questionnaires. A multilevel meta-analysis approach was adopted by two

studies (Wong & Kong, 2020 and Niu et al., 2023) to measure the association between parenting styles and prosocial behaviors that prevent internet addiction in children and adolescents. parenting styles questionnaires such as the Parental Authority Questionnaire (PAQ) (Lukasvska et al., 2020; Wong et al. 2020; Yaffe & Seroussi, 2019, Setiawati et al., 2021) were implemented to classify parenting styles into authoritative, authoritarian, permissive and Neglectful. Some studies (Karaer & Akdemir, 2019; Yang & Kim, 2021) used the Parenting Styles and Dimensions Questionnaire (PSDQ) to identify the characteristic features of parenting such as warmth, autonomy, control, demandingness etc. Özgür (2019) used the Parent Child Interaction Questionnaire to assess the quality of communications between the parent and child that affect internet addiction. While Horita et al. (2022) collected the observations from the qualitative data on parent-child interactions and parenting styles. The problematic internet use and internet addiction were measured using standardized scales. The Young's Internet Addiction Test (IAT) was used to measure the severity of IA and its impact on children and adolescents in terms of withdrawal , compulsive behavior and tolerance (Chen et al., 2020) ; Jeon et al. (2021)). This format used the Likert scale consisting of 20 points, whereas the 17 4-point scale was used by Sun and Wilkinson (2020) to measure IA and 4-point Likert Scale items were used to measure parenting styles. Other studies like Lukavska et al. (2020) employed the Problematic Internet Use Questionnaire (PIUQ) for assessment of negative outcomes associated with obsessive-compulsive internet surfing. Additionally, some studies used standardized scales and instruments for measuring other variables concerning parenting styles and internet addiction. Agbaria and Bdier (2021) appointed the General Self-Efficacy Scale to measure the confidence of the students to regulate the duration of internet use. Chen et al. (2020) states that the Time Management Disposition Scale is effective to assess the ways by which adolescents plan their schedule and manage their time accordingly and effectively. Li et al. (2022) used the Internet Gaming Disorder (IGD) scale to assess the participants on DSM -5 criteria, to identify if they qualified for internet gaming disorder. Moreover the mobile phone addiction index based on a 5-point Likert scale was implemented to measure the degree of smartphone addiction in adolescents. The Emotion Regulation Questionnaire was yet another instrument chosen to measure the emotional approach involved with differential extent of internet use by Karaer & Akdemir, (2019). To understand the similar patterns of instruments and scales based on which the result outcomes were derived the following table 3 was plotted.

Table 3 : Summary of Measurement Instruments from the selected papers

Authors & Year	Parenting Styles Measurement Tools	Internet Addiction Measurement Tools	Additional Measurement Tools
Agbaria & Bdier (2021)	PAQ	IAT	General Self-Efficacy Scale
Aziz et al. (2022)	PSDQ	IAT	Family Interaction Scale
Chen et al. (2020)	PAQ	IGDS	Time Management Disposition Scale
Horita et al. (2022)	Observational Methods	IAT	Parental Relationship Survey
Jeon et al. (2021)	PAQ	IAT	Aggression and Self-Control Scales
Karababa (2020)	PSDQ	IAT	No additional scale
Karaer & Akdemir (2019)	PSDQ	IAT	Emotion Regulation Questionnaire
Li et al. (2022)	PAQ	IAT	Parental Care and Protection Scale
Lo et al. (2020)	PAQ	IAT	No additional scale
Lukavska et al. (2020)	PAQ	PIUQ	No additional scale
Niu et al. (2023)	Meta-Analysis (Various Instruments)	Meta-Analysis (Various Instruments)	No additional scale
Onyekachi et al. (2022)	PAQ	IAT	Social Interaction Anxiety Scale
Özgür (2019)	PBIQ	IAT	No additional scale
Serna et al. (2023)	PAQ	IAT	No additional scale
Setiawati et al. (2021)	PAQ	IAT	No additional scale

Sun (2023)	PAQ	IAT	No additional scale
Sun & Wilkinson (2020)	PAQ	IAT	No additional scale
Wong et al. (2020)	PAQ	IAT	No additional scale
Yaffe & Seroussi (2019)	PAQ	IAT	No additional scale
Yang & Kim (2021)	PAQ	IAT	Work-Family Conflict Scale

Note.

PAQ = Parenting Authority Questionnaire;

PSDQ = Parenting Styles and Dimensions Questionnaire;

PBIQ = Parental Bonding Instrument Questionnaire;

IAT = Internet Addiction Test;

IGDS = Internet Gaming Disorder Scale;

PIUQ = Problematic Internet Use Questionnaire.

Four broad parenting styles are perceived by children and adolescents that regulate IA.

Authoritative Parenting Style: Seven of twenty studies indicate that authoritative parenting styles proved as the protective factor against IA in children and adolescents. These studies show that higher intention of academic excellence, self-efficacy, and prosocial behaviors are exhibited in children under authoritative parenting which is characterized by high warmth and high control (Sun & Wilkinson., 2020, Wong & Kong, 2020). These studies were all research studies where adolescents reported a negative correlation between PIU, IA, and authoritative parenting styles. Although some children might be classified under “at risk” categories under authoritative parenting, they are surely not highly “addicted” (Aziz et al., 2022). Authoritative parents are less overprotective and provide high parental care which reduces the inclination toward extended hours of online gaming behavior (Li et al., 2022). This shows a decline of 0.57 units of problematic internet use with each unit of authoritative parenting measures on the regression model (Onyekachi et al., 2022). In general, these studies indicate that this parenting technique is perceived by children as the lowest inducer of problematic online behaviors by reducing their dependency on online gaming and information (Özgür, 2019; Yang & Kim, 2021). Therefore, the lowest levels of IA are associated with authoritative parenting.

Authoritarian Parenting Style: Seven out of twenty studies support that authoritarian parenting is responsible for an increased predisposition to compulsive internet use in children and adolescents. These research studies primarily characterized authoritarian parenting to be highly controlling combined with low warmth toward the children (Setiawati et al., 2021, Lukavska et al., 2020, Serna et al., 2023, Agbaria & Bdier., 2021). This pushes teenagers towards increased IA (Horita et al., 2022). However, in two of the studies authoritarian parenting can reduce online cybercrimes by self-control, causing lessened dependency on online platforms with at least one authoritative co-parent (Yaffe & Seroussi, 2019, Özgür, 2019). Overall, the studies highlight authoritarian parenting as a significant risk factor for adolescents being inclined toward IA.

Permissive Parenting Style: Four out of twenty studies claim high risks of IA in children and adolescents’ supervision and control that allows the children to develop obsessive tendencies for internet surfing (Agbaria et al., 2021, Setiawati et al., 2021, Lo et al., 2020). In addition, Onyekachi et al., (2022) noted a rise in 0.89 units of PIU with increase in per unit of permissive parenting. Therefore, a significant rise in PIU indicates high levels of IA, highlighted by the studies which establish a direct relationship between permissive parenting style and IA, mostly in association with authoritarian parenting.

Neglectful Parenting Style: Three out of twenty studies predominantly state that neglectful parents are the highest predictors of IA in children and adolescents. Characterized by low warmth and low control, children often perceive even permissive parents to be emotionally unavailable and nonrestrictive (Lukavska et al., 2020,

Lo et al., 2020). Both studies report that a lack of boundaries and self-control in a neglectful parenting style results in highly addicted children and adolescents indicating the lowest reliability scores for PIU (Onyekachi et al., 2022). Therefore IA and neglectful parenting are strongly and positively correlated to each other.

Discussions: Insights into Research Questions

RQ1: What are the characteristics of different perceived parenting styles?

Characteristic features of Diverse Perceived Parenting Styles

The classification of perceived parenting styles is grounded in Baumrind's (1966) foundational framework, subsequently extended by Maccoby and Martin (1983) into a two-dimensional model distinguishing parenting behaviour along axes of demandingness (the degree of behavioural control and structure imposed) and responsiveness (the degree of warmth, acceptance, and emotional availability). This expanded framework yields four parenting styles that differ systematically in their combinations of these dimensions and, as the included studies demonstrate, in their associations with IA risk.

Authoritative parenting (high demandingness, high responsiveness) is consistently characterised in the included studies as the style most conducive to healthy adolescent development. Children raised under authoritative parenting receive emotional warmth alongside clear and consistent behavioural boundaries, which fosters self-efficacy, self-control, and prosocial behaviour (Sun & Wilkinson, 2020; Wong & Kong, 2020). Niu et al. (2023) found that children from authoritative households did not exhibit elevated psychological disturbance associated with PIU. Aziz et al. (2022) further identified that authoritative parents actively set time limits on internet use and monitor the sites accessed by their children, thereby directly limiting opportunities for IA to develop.

Authoritarian parenting (high demandingness, low responsiveness) is characterised by strict control, limited emotional warmth, and a tendency toward aggressive or punitive reactions to perceived misbehaviour, including internet use (Setiawati et al., 2021; Sun & Wilkinson, 2020). Lacking parental warmth and open dialogue weakens children's self-confidence and independent decision-making, pushing them to seek emotional support and social connection online (Horita et al., 2022). Aziz et al. (2022) further noted that adolescents raised under authoritarian parenting showed the greatest internet addiction severity across all parenting-style groups.

Permissive parenting offers emotional warmth yet minimal behavioural supervision and limits. Without clear screen-time rules, young people easily develop uncontrolled online routines (Lo et al., 2020; Setiawati et al., 2021). Notably, Onyekachi et al. (2022) found permissive parenting linked to the sharpest PIU rise in their sample, with PIU scores increasing by 0.89 units per unit growth in permissive parenting.

Unlike Baumrind's original three-style framework, neglectful parenting was later defined by Maccoby and Martin (1983) as a fourth parenting category widely used in modern empirical work. Marked by emotional detachment and poor behavioural monitoring, this style leaves adolescents with unmet emotional needs, leading them to rely heavily on online spaces for social and psychological fulfilment (Lukavska et al., 2020; Lo et al., 2020). Onyekachi et al. (2022) found that neglectful parenting was associated with the most severe IA outcomes among the styles assessed.

Taken together, these four styles form a clear spectrum of IA risk, with authoritative parenting at the protective end and neglectful parenting conferring the greatest vulnerability.

RQ2: What is the association between varied parenting styles and the risk of internet addiction in children?

Correlation between Perceived Parenting Style and Risk of Internet Addiction in Children and Adolescents

Across reviewed literature, perceived parenting styles relate unevenly to adolescent internet addiction (IA), shaped by parental behaviours and youths' psychological reactions.

Authoritative parenting protects against IA via two key pathways. Emotional warmth fosters self-efficacy, self-control and independent decision-making, lowering adolescents' urge to seek validation or escape online (Jeon

et al., 2021; Yang & Kim, 2021). Clear internet-use rules, including time limits and content monitoring, further curb excessive online engagement (Aziz et al., 2022; Karababa, 2020). Together, these psychological and behavioural mechanisms explain its consistent negative link with IA.

Findings for authoritarian parenting are mixed. Most research links its strict, low-warmth style to higher IA risk by harming adolescents' self-identity and driving online social emotional seeking (Setiawati et al., 2021; Lukavska et al., 2020; Horita et al., 2022). Yet two studies note it may reduce certain online risks, especially when paired with an authoritative co-parent offering emotional support (Yaffe & Seroussi, 2019; Özgür, 2019). Such buffering effects indicate its risks are context-dependent, warranting further co-parenting research.

Permissive parenting raises IA risk mainly through lack of structure. Without consistent screen-time rules or oversight, young people gain unrestricted internet access and gradually lose self-regulation over online habits (Lo et al., 2020; Onyekachi et al., 2022). The association between permissive parenting and IA appears particularly strong for gaming-related IA, where the absence of parental time limits is most consequential (Setiawati et al., 2021).

Neglectful parenting is associated with the most severe IA outcomes through a distinct emotional pathway. The simultaneous absence of warmth and structure leaves adolescents without the psychological resources or behavioural constraints to moderate internet use; the internet then becomes a primary means of meeting unmet social and emotional needs (Sun, 2023; Lo et al., 2020; Chen et al., 2020). It is important to note, however, that most studies in this review could not establish causal directionality due to their cross-sectional designs—it remains plausible that adolescents with severe IA elicit more neglectful or authoritarian parental responses over time.

RQ3 How does perceived parenting style influence the risk of internet addiction?

Impact of perceived parental style on risk of IA

The third research question moves beyond characterising associations to examining the mechanisms and real-world consequences through which perceived parenting style shapes IA risk. The evidence across the 20 included studies points to three primary impact pathways: psychological capital development, behavioural regulation, and emotional regulation capacity.

Firstly, authoritative parenting exerts a protective effect partly by building the child's internal psychological resources. Li et al. (2022) found that children raised under authoritative parenting demonstrated stronger self-confidence, autonomy, and empathy—qualities that reduce reliance on online environments for social reinforcement. Agbaria and Bdier (2021) similarly showed that self-efficacy, developed through authoritative parenting, was a significant mediator between parenting style and IA: adolescents with higher self-efficacy were less likely to develop addictive internet behaviours regardless of peer pressure. This suggests that the impact of authoritative parenting on IA is at least partially indirect, operating through the cultivation of internal self-regulatory resources.

Secondly, authoritative parents directly limit adolescent internet use via practical supervision, such as setting screen-time boundaries, checking online content, and keeping regular sleep routines (Yaffe & Seroussi, 2019). By comparison, Yang and Kim (2021) reported that maternal work-family conflict weakens parental oversight, shifting parenting toward authoritarian or permissive patterns and raising children's problematic internet use. This evidence confirms parenting styles shape internet addiction risk through tangible regulatory behaviours, which external stressors can easily disrupt, alongside psychological influences on young people.

At last, emotional regulation pathway. Karaer and Akdemir (2019) revealed a key mechanism behind internet addiction: parents of affected adolescents show less emotional engagement and greater alexithymia (difficulty recognising and sharing feelings). This emotional disconnection, most severe in neglectful households yet also seen under authoritarian parenting, deprives teenagers of proper emotional-regulation guidance. They then turn to online activities as an unhealthy coping strategy. Accordingly, neglectful parenting harms adolescents primarily by lacking emotional support for stress management, rather than direct negative behaviours (Lo et al., 2020; Onyekachi et al., 2022).

Collectively, these three pathways suggest that effective IA prevention programmes should target not only parental monitoring behaviours but also the emotional availability and self-efficacy-building practices of parents. Parent-focused educational programmes should prioritise training caregivers in warm communication, clear boundary setting, and emotional self-awareness, core competencies often lacking within authoritarian and neglectful parenting approaches. School and community-led initiatives can additionally screen for harmful parenting patterns as an early risk marker, supporting timely detection of adolescents vulnerable to problematic internet use.

CONCLUSIONS

This systematic review synthesised findings from 20 peer-reviewed articles to explore how perceived parenting styles relate to internet addiction (IA) among children and adolescents. By answering three predefined research questions, the study draws the key conclusions outlined below.

With respect to RQ1 (characteristics of perceived parenting styles), the included studies consistently operationalized parenting styles using Baumrind's (1966) two-dimensional framework of demandingness and responsiveness, yielding four distinct profiles: authoritative, authoritarian, permissive, and neglectful. These profiles exhibit markedly different patterns of emotional warmth, behavioural control, and monitoring of adolescent internet use.

With respect to RQ2 (associations between parenting styles and IA risk), authoritative parenting was the only style consistently and negatively associated with IA and PIU, while authoritarian, permissive, and neglectful styles were each positively associated with varying degrees of IA risk. The risk mechanisms differed: authoritarian parenting acted through undermined self-concept and parent-child conflict; permissive parenting through the absence of behavioural monitoring; and neglectful parenting through emotional unavailability that drives adolescents to seek fulfilment online.

With respect to RQ3 (mechanisms of influence), the impact of parenting styles on IA risk operates through at least three pathways, psychological capital development, behavioural regulation, and emotional regulation capacity with practical implications for the design of school and community-based IA prevention programmes targeting parental behaviours and emotional competencies.

Finally, several limitations of this review should be acknowledged. First, just 20 out of 120 initial studies were included, limiting synthesis breadth. Strict criteria ensured consistency yet may exclude relevant alternative design research. Broader reviews or meta-analyses could capture more evidence. Second, one reviewer CASP quality appraisal lacked cross verification, risking subjective judgements. Heterogeneous study designs ruled out standard quality cut offs, with limitations only discussed where they affect result interpretation. The third limitation could be a lack of refinement in search terms, that could trace incidents of IA addiction of specific forms. Future research must take care of the above-mentioned criteria to derive the explicit required for data collection.

REFERENCE

1. Agbaria, Q., & Bdier, D. (2021). The role of parental style and self-efficacy as predictors of internet addiction among Israeli-Palestinian college students in Israel. *Journal of Family Issues*, 43(4), 875-893. <https://doi.org/10.1177/0192513X21995869>
2. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>
3. Aziz, M., Erbad, A., Brahim Belhaouari, S., Abdelmoneium, A. O., Al-Harashsheh, S., Bagdady, A., & Ali, R. (2022). The interplay between adolescents' Internet addiction and family-related factors: Three common patterns. *International Journal of Adolescence and Youth*, 27(1), 418-431. <https://doi.org/10.1080/02673843.2022.2115307>
4. Baumrind, D. (1966). Effects of authoritative parental control on child behavior. *Child Development*, 37(4), 887-907. <https://doi.org/10.2307/1126611>
5. Bickham, D. S. (2021). Current research and viewpoints on internet addiction in adolescents. *Current*

- pediatrics reports, 9, 1-10. <https://doi.org/10.1007/s40124-020-00236-3>
6. Chen, I. H., Lee, Z. H., Dong, X. Y., Gamble, J. H., & Feng, H. W. (2020). The influence of parenting style and time management tendency on internet gaming disorder among adolescents. *International Journal of Environmental Research and Public Health*, 17(23), 9120. <https://doi.org/10.3390/ijerph17239120>
7. Costa, W. P. D., Fernandes, M. D. S. V., Memon, A. R., Noll, P. R. E. S., Sousa, M. D. M., and Noll, M. (2024). 'Factors influencing the work of researchers in Scientific Initiation: A systematic review protocol', *Plos one*, 19(1), pp.e0297186. <https://doi.org/10.1371/journal.pone.0297186>
8. Faltýnková, A., Blinka, L., Ševčíková, A., & Husarova, D. (2020). The associations between family-related factors and excessive internet use in adolescents. *International journal of environmental research and public health*, 17(5), 1754. <https://doi.org/10.3390/ijerph17051754>
9. Horita, H., Seki, Y., & Shimizu, E. (2022). Parents' perspectives on their relationship with their adolescent children with internet addiction: survey study. *JMIR Pediatrics and Parenting*, 5(4), e35466. <https://doi.org/10.2196/35466>
10. Jeon, H. G., Lee, S. J., Kim, J. A., Kim, G. M., & Jeong, E. J. (2021). Exploring the influence of parenting style on adolescents' maladaptive game use through aggression and self-control. *Sustainability*, 13(8), 4589. <https://doi.org/10.3390/su13084589>
11. Karababa, A. (2020). Examining internet addiction of early adolescents in terms of parenting styles. *Turkish Psychological Counseling and Guidance Journal*, 10(57), 229-254. <https://dergipark.org.tr/en/pub/tpdrd/issue/55086/756172>
12. Karaer, Y., & Akdemir, D. (2019). Parenting styles, perceived social support and emotion regulation in adolescents with internet addiction. *Comprehensive psychiatry*, 92, 22-27. <https://doi.org/10.1016/j.comppsy.2019.03.003>
13. Kokka, I., Mourikis, I., Nicolaides, N. C., Darviri, C., Chrousos, G. P., Kanaka-Gantenbein, C., & Bacopoulou, F. (2021). Exploring the effects of problematic internet use on adolescent sleep: a systematic review. *International journal of environmental research and public health*, 18(2), 760. <https://doi.org/10.3390/ijerph18020760>
14. Kraus, S., Breier, M., Lim, W. M., Dabić, M., Kumar, S., Kanbach, D., ... and Ferreira, J. J. (2022). 'Literature reviews as independent studies: guidelines for academic practice', *Review of Managerial Science*, 16(8), pp.2577-2595. <https://doi.org/10.1007/s11846-022-00588-8>
15. Li, Z. K., Shi, L. J., & Cai, X. L. (2022). Smartphone addiction is more harmful to adolescents than Internet gaming disorder: Divergence in the impact of parenting styles. *Frontiers in Psychology*, 13, 1044190. <https://doi.org/10.3389/fpsyg.2022.1044190>
16. Lo, B. C. Y., Lai, R. N. M., Ng, T. K., & Wang, H. (2020). Worry and permissive parenting in association with the development of internet addiction in children. *International journal of environmental research and public health*, 17(21), 7722. <https://doi.org/10.3390/ijerph17217722>
17. Lozano-Blasco, R., Robres, A. Q., & Sánchez, A. S. (2022). Internet addiction in young adults: A meta-analysis and systematic review. *Computers in Human Behavior*, 130, 107201. <https://doi.org/10.1016/j.chb.2022.107201>
18. Lukavska, K., Vacek, J., & Gabhelík, R. (2020). The effects of parental control and warmth on problematic internet use in adolescents: A prospective cohort study. *Journal of behavioral addictions*, 9(3), 664-675. <https://doi.org/10.1556/2006.2020.00068>
19. Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P. H. Mussen (Ed.), *Handbook of child psychology* (Vol. 4, pp. 1-101). Wiley.
20. Maxwell, J. A. (2021). The importance of qualitative research for investigating causation. *Qualitative Psychology*, 8(3), 378-388. <https://doi.org/10.1037/qap0000219>
21. Niu, X., Li, J. Y., King, D. L., Rost, D. H., Wang, H. Z., & Wang, J. L. (2023). The relationship between parenting styles and adolescent problematic Internet use: A three-level meta-analysis. *Journal of Behavioral Addictions*, 12(3), 652-669. <https://doi.org/10.1556/2006.2023.00043>
22. Nielsen, P., Favez, N., Liddle, H., & Rigter, H. (2019). Linking parental mediation practices to adolescents' problematic online screen use: A systematic literature review. *Journal of behavioral addictions*, 8(4), 649-663. DOI: <https://doi.org/10.1556/2006.8.2019.61>
23. Onyekachi, B. N., Egboluche, F. O., & Chukwuorji, J. C. (2022). Parenting style, social interaction anxiety, and problematic internet use among students. *Journal of Psychology in Africa*, 32(1), 79-85.

<https://doi.org/10.1080/14330237.2021.2002030>

24. Özgür, H. (2019). Online Game Addiction Among Turkish Adolescents: The Effect of Internet Parenting Style. *Malaysian Online Journal of Educational Technology*, 7(1), 47-68. <http://dx.doi.org/10.17220/mojet.2019.01.004>
25. Qi, H., Kang, Q., & Bi, C. (2022). How does the parent–adolescent relationship affect adolescent internet addiction? Parents’ distinctive influences. *Frontiers in psychology*, 13, 886168. <https://doi.org/10.3389/fpsyg.2022.886168>
26. Sami, H., Danielle, L., Lihi, D., & Elena, S. (2018). The effect of sleep disturbances and internet addiction on suicidal ideation among adolescents in the presence of depressive symptoms. *Psychiatry research*, 267, 327-332. <https://doi.org/10.1016/j.psychres.2018.03.067>
27. Serna, C., García-Perales, J., & Martínez, I. (2023). Protective and risk parenting styles for internet and online gambling addiction. *Human Behavior and Emerging Technologies*, 2023(1), 6674541. <https://doi.org/10.1155/2023/6674541>
28. Shek, D. T., Zhu, X., & Dou, D. (2019). Influence of family processes on internet addiction among late adolescents in Hong Kong. *Frontiers in Psychiatry*, 10, 113. <https://doi.org/10.3389/fpsyg.2019.00113>
29. Setiawati, Y., Hartanti, D. T., Husada, D., Irwanto, I., Ardani, I. G. A. I., & Nazmuddin, M. (2021). Relationship between paternal and maternal parenting style with internet addiction level of adolescents. *Iranian Journal of Psychiatry*, 16(4), 438. <https://doi.org/10.18502/ijps.v16i4.7231>
30. Shivam, S., Chaudhari, B., Chaudhury, S., & Saldanha, D. (2021). Parenting style and personality correlates of internet addiction: A cross-sectional study. *Medical Journal of Dr. DY Patil University*, 14(2), 143-154. https://doi.org/10.4103/mjdrdypu.mjdrdypu_329_19
31. Stavoulaki, E., Li, M., & Gupta, J. (2021). Perceived parenting styles, academic achievement, and life satisfaction of college students: the mediating role of motivation orientation. *European Journal of Psychology of Education*, 36, 693-717. <https://doi.org/10.1007/s10212-020-00493-2>
32. Steinfeld, N. (2021). Parental mediation of adolescent Internet use: Combining strategies to promote awareness, autonomy and self-regulation in preparing youth for life on the web. *Education and Information Technologies*, 26(2), 1897-1920. <https://link.springer.com/article/10.1007/s10639-020-10342-w>
33. Sun, Y. (2023). The role of family on internet addiction: A model analysis of co-parenting effect. *Cogent Social Sciences*, 9(1), 2163530. <https://doi.org/10.1080/23311886.2022.2163530>
34. Sun, Y., & Wilkinson, J. S. (2020). Parenting style, personality traits, and interpersonal relationships: A model of prediction of internet addiction. *International Journal of Communication*, 14, 23. <https://ijoc.org/index.php/ijoc/article/view/11226>
35. Wong, T. K., Konishi, C., & Kong, X. (2020). Parenting and prosocial behaviors: A meta-analysis. *Social Development*, 30(2), 343-373. <https://doi.org/10.1111/sode.12481>
36. Yaffe, Y., & Seroussi, D.-E. (2019). Problematic Internet use in Israeli-Arab adolescent males: Do parenting styles matter? *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 13(4), article 5. <https://doi.org/10.5817/CP2019-4-5>
37. Yang, H. M., & Kim, H. R. (2021). Work–family conflict on children’s internet addiction: role of parenting styles in Korean working mother. *International journal of environmental research and public health*, 18(11), 5774. <https://doi.org/10.3390/ijerph18115774>