

## Review Article

# Parenting Style and Suicidal Behavior: A Focused Review

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**Objectives.** Parenting is the general child-rearing practice that has both long- and short-term impacts on the physical, emotional, mental, and social development of the children. We aim at seeing the relationship between parenting style and suicidal behaviors. **Methods.** A search was conducted in Medline, Embase, and PsychINFO to identify the articles assessing the relationship between different types of parenting styles and suicidal behavior. We included 32 articles in the review published from inception to search date. **Results.** Among the 32 studies, 27 studies used a cross-sectional study design, 17 were published between 2011 and 2020, and most of the studies included respondents with ages between 9 and 21 years. A wide variety of the used instruments to assess suicidal behavior, and parenting style was noted. Eight studies revealed that authoritarian parenting style is one of the predictors of suicidal behavior, while one study reported the authoritarian parenting style as a resilient factor. Both dominating and flexible parenting styles were associated with higher suicidal behavior, and two studies reported that the permissive style is a contributing factor to suicidal ideation among participants. **Conclusion.** This review identified the supportive notion that authoritarian parenting style has an association with suicidal behavior in adolescence, and later life. However, a prudential judgment is warranted due to the heterogeneity of study methods, population, contexts, and measurement tools.

## 1. Introduction

Parenting is the general child-rearing practice in day-to-day life. Parenting practices have both long- and short-term impacts on the development of the children affecting the psychological, emotional, and mental health [1]. It plays an important role in developing and perpetuating childhood psychiatric disorders. Parenting style characterizes the child-rearing practice in several categorical aspects to measure [1, 2]. Baumrind classified the parenting styles into three types mentioned as authoritative, authoritarian, and permissive based on two dimensions, i.e., demandingness and responsiveness [3]. Maccoby and Martin added an additional type of parenting to the existing three creating four types of parenting, i.e., authoritative, authoritarian, permissive, and neglectful [4]. The authoritative parents have a balance between the demandingness and responsiveness with children; the authoritarian parents have high demandingness

and low responsiveness; the permissive parents have low demandingness and high responsiveness; the neglectful parents have no definitive pattern, usually have low demandingness and low responsiveness [3–7]. However, the type, dimensions, and impact of parenting are subjected to vary from culture to culture [1, 2]. Among the types of parenting, authoritative parenting has been found to be associated with positive outcomes than other types which are replicated in western countries. Children with authoritative parents are more likely to have higher perceived well-being, self-esteem, and life satisfaction, and most appropriate long-term development [1]. They also have higher academic achievements, problem-solving strategies, and a lower rate of internalizing and externalizing problems, and substance abuse [1]. Parental harshness (rejection and physical punishment) is associated with anxiety, depression, social anxiety somatic symptoms, aggressive behavior, bullying, and suicidal behavior [1, 8]. Parental responsiveness is associated with a lower

rate of depressive disorder, eating, social anxiety, and substance abuse [1]. There is a dearth of empirical studies assessing the types, dimensions, and impact of parenting on the short- and long-term development of the children, especially in non-western and Low-and Middle-Income Countries (LMICs).

Suicide is a global public health problem affecting more than 700,000 people in 2019 in the world [9]. It is the fourth leading cause of death among 15-19-year old [9]. Suicide is an extremely complicated phenomenon with multifaceted interactions among risk factors in different aspects like stress-diathesis interaction, gene-environment interface, proximal, and distal risk factors connections [10, 11]. Hawton and van Heeringen identified several distal risk factors for suicide mentioned as genetic loading, personality traits with impulsivity and aggression, less fetal growth and perinatal complications, early adverse life events, and neurobiological problems [12]. The paper also mentioned some proximal risk factors like mental illness, physical diseases, psychosocial crisis, availability of methods, and being exposed to models [12].

Replicating empirical studies assessed the influence of parent-child relationship on suicidal behavior and revealed that there should have been an undeniable relationship especially when a family endures a disrupted environment prevailing parental discord, parental separation, frequent change in caregiver, and physical or sexual abuse [13]. However, there is a lack of efforts to synthesis the reviews from the empirical studies assessing the impact of any individual parenting style and suicidality (thought/idea, plan, and attempt). On this background, we aimed to see the relationship between parenting style and suicidal behaviors across the life span from available empirical studies. In the current review, we considered suicidal behavior that suicidal idea/ thought, plan, and attempt.

## 2. Methods

**2.1. Search Strategy.** A search was conducted in Medline, Embase, and PsychINFO to identify the articles assessing the relationship between different types of parenting styles and suicidal behavior. We included the articles published from inception to search date. The search details are mentioned in supplementary file 1. Stepwise article selection is mentioned in Figure 1.

**2.2. Inclusion Criteria.** Original articles, studies with quantitative estimates, published in the English language, and articles available in full-text were included.

**2.3. Exclusion Criteria.** Qualitative studies, studies published in other language, other type of studies, i.e., review, editorial, erratum, and letters were excluded.

**2.4. Data Extraction.** We scrutinized 32 articles from different countries of all the continents of the world. We identified the studies, publication year, country of the study, instruments used to measure the parenting style and suicidality, sample size, study population, study design, data collection technique, and summary highlighting the relationship

between parenting style and suicidal behavior. The extracted variables are mentioned in Table 1.

**2.5. Ethical Aspects.** We reviewed secondary publicly available articles. Therefore, no institutional review board approval was sought to conduct the study.

## 3. Results

**3.1. Distribution of the Studies.** The review included 32 original studies from different countries of all the continents of the world (Figure 1). Among the included studies, 27 studies used a cross-sectional study design, three studies used longitudinal follow up design, and the remaining two studies were retrospective cohort studies. Only three studies are published before 2000, six studies are published between 2000 and 2010, a vast majority (17) studies were published between 2011 and 2020, and only two studies were published in the year 2021 (Table 1).

**3.2. Distribution of Population.** Almost every single study used a sample size of more than 100 with one exception; the study published in Australia in 1987 used 43 cases and 42 controls. In most of the studies, the age of the study population varied from 9 to 21 years (Table 1). The majority of the population was taken from nonclinical apparently health groups (68.57%;  $n = 22$ ). However, the population was undergraduate medical students in four studies, and hospitalized patients in two studies. Sixteen studies used self-reporting measures for data collection, eight studies used the interview method, survey methods were used by six studies, and a single study used cohort design.

### 3.3. Distribution of the Instruments

**3.3.1. Instruments Measuring Parenting Style.** There is not very much similarity when it comes to using research instruments among the included studies. A total of eight studies have used Parental Bonding Instrument (PBI), three studies used Child Behavior Checklist (CBCL), two studies used Parental Authority Questionnaire (PAQ), and remaining studies used Parent-Child Conflict Tactics Scale (PCCTS), Childhood Experience of Care and Abuse (CECA), Measure of Parental Style (MOPS), Short Egan Minnen Barndoms Uppfostran Chinese Version (S-EMBU-C) for parenting style, Perception of Parenting Style and Practices (PPSP), Warmth and Acceptance Scale (WAS), Gratitude Questionnaire (GQ-6), and Influential Relationships Questionnaire (IQR) (Table 1).

**3.3.2. Instruments Measuring Suicidal Behavior.** The studies used various instruments to measure suicidal behavior such as Self-Injurious Thoughts and Behavior Interview (SITBI), Health Behavior in School-aged Children (HBSC), Massachusetts Youth Screening Instrument (MYSI), Adolescent Suicide Questionnaire (ASQ), Childhood Experience of Care and Abuse (CECA), Suicidality subscale of the Korean Version of the Composite International Diagnostic Interview (K-CIDI version 2.1), Risk for Suicide Questionnaire

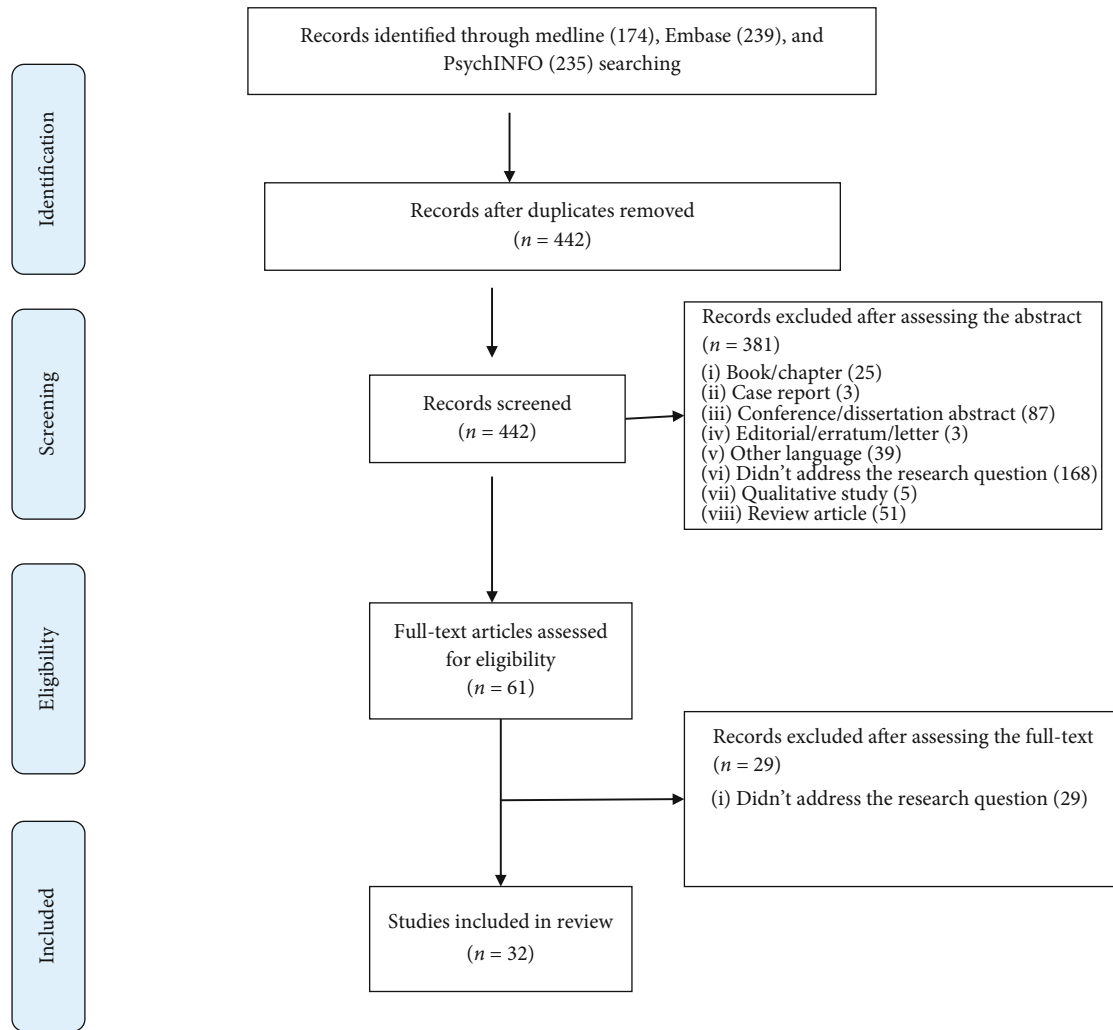


FIGURE 1: PRISMA 2009 flow diagram.

(RSQ), Scale for Suicidal Ideation (SSI), and General Health Questionnaire (GHQ-28) (Table 1).

### 3.4. Association of Parenting Style and Suicidal Behavior.

This review has identified that there are several parenting factors, which are responsible for suicidal behavior among children and adolescents. Eight studies revealed that authoritarian parenting style is one of the predictors of suicidal behavior among the participants, and one study reported that authoritarian parenting style was found to be a resilient factor. Dominating and flexible parenting styles were also associated with higher suicidal behavior according to two different studies, and two studies reported that permissive style of parenting is also a contributing factor for suicidal ideation among participants. Other significant factors reported by other studies are paternal criticism, less caring and overprotective nature of parents, parental neglect, lack of adequate supervision single mother upbringing, less maternal affection, overprotectiveness, the curvilinear relationship between parental involvement, maternal overcontrol, low paternal warmth, and negative child-rearing practices, physical punishment from the parents, indirect

association between childhood maltreatment, demanding parenting, and abuse from parents.

## 4. Discussion

The aim of the present review was to examine the empirical evidence for an association between parenting styles and suicidal behavior (thought/idea, plan, and attempt) across age groups. Our search efforts revealed a considerable increase in research focus on parenting and suicidal behavior with time; more than half of the reviewed studies were published in the last decade (2011-2020). We found that the parenting style most associated with increased suicidal behavior across the reviewed studies was authoritarian parenting. However, discordant findings were also noted. Relatively, limited evidence also points to the role of dominating, flexible, and permissive parenting in fostering suicidal behavior. Other key parenting factors that have been shown to increase the risk of suicidal behavior include inconsistent parenting style, parental neglect, being raised by a single mother, and overprotective parenting. Interestingly, one study showed a curvilinear relationship between parental involvement and

TABLE 1: Summary of the articles.

SN	Study	Country	Instrument	Sample size	Study design	Study population	Data collection technique	Summary of the article
1	Allison et al. [13]	Australia	IQR, Adolescent Suicide Questionnaire	307	Cross-sectional	13 to 17 years	SRM	Paternal criticism, less caring & overprotective nature of parents were associated with high level of suicidal ideation, plans, threats, and attempts
2	Banstola et al. [8]	Nepal		575	Cross-sectional	13 to 19 years and their parents	SRM	Authoritarian parenting style was identified as a risk factor for suicidal behavior among children
3	Bifulco et al. [30]	UK	Childhood Experience of Care and Abuse (CECA)	160	Cross-sectional	High risk young people (16-30 years)	Interview	Parental neglect, lack of adequate supervision, and single mother upbringing were identified as the predictors of suicidal behavior
4	Choi et al. [31]	Korea	PAQ, Suicidality sub scale of the Korean Version of the Composite International Diagnostic Interview (K-CIDI version 2.1)	1071	Cross-sectional	Adolescents	SRM	Suicidal thoughts, plans and attempts were significantly high in the authoritarian parenting group compared to democratic and permissive groups
5	Coelho et al. [32]	Brazil	PBI	828	Cross-sectional	Pregnant teenagers	Interview	Maternal affection less control and paternal neglectful parenting were identified as a predictor of suicidal behavior in pregnant teenagers
6	Donath et al. [33]	Germany		44,610	Cross-sectional	9th grade students	Survey	Rejecting-neglecting parenting was identified as significant predictors for suicidal attempts, whereas authoritative parenting, parental warmth were found to be protective
7	Ehnvall et al. [34]	Australia	Measure of Parental Style (MOPS)	343	Retrospective	Mood disorder patients	SRM	Female depressed patients with rejected or neglected parenting by were found to have an increased risk of lifetime suicide attempt
8	Gau et al. [35]	Taiwan	Chinese Version of the PBI	2919	Cross-sectional	First year college students	SRM	Low affection, overprotection and authoritarian parenting were associated with increased suicidal behavior
9	Greening et al. [21]	USA	PAQ-Revised (PAQ-R), Risk for Suicide Questionnaire (RSQ)	172	Cross-sectional	6 to 12 years	Parent interviews, the children SRM	Authoritarian parenting was identified as resilient factor for suicidal behavior, and flexible parenting was identified as a predictor of suicidal ideation
10	Gui et al. [36]	China	Short Egan Minnen Barndoms Uppfostran Chinese Version (S-EMBU-C) for parenting style	2598	Cross-sectional	Medical undergraduate students	Survey	Variations in parenting style between father and mother in the domains of emotional warmth, nurture rejects and over-protectiveness were associated with lifetime suicidal ideation

TABLE 1: Continued.

SN	Study	Country	Instrument	Sample size	Study design	Study population	Data collection technique	Summary of the article
11	Heider et al. [37]	Belgium, France, Germany, Italy, the Netherlands, Spain	PBI- Short form, World Mental Health Composite International Diagnostic Interview	7740	Cross-sectional	Adults	Interview	Inadequate maternal care was significantly associated with higher incidence of suicidal ideation and attempts
12	Huang et al. [38]	Taiwan		5328	Cross-sectional	10 to 13 years	Survey	Authoritative and authoritarian parenting styles among male students and authoritarian parenting style among female students was associated with a higher level of suicidal ideation
13	Kim [26]	48 low and middle income countries		142,716	Cross-sectional	Students of 13 to 17 years	Survey	Curvilinear relationship between parental involvement and suicidal behavior
14	King et al. [39]	USA		17,399	Cross-sectional	12 to 17 years	Survey	Lack of authoritative behaviors was associated with increased risk for suicidal ideation, plans and attempts
15	Lai et al. [40]	Hong Kong	PBI, PAQ, SSI, Family Climate Questionnaire	120	Cross-sectional	Secondary school students (15 to 19 years)	SRM	Authoritarian parenting style, lack of parental care, maternal over control, low paternal warmth, and negative child-rearing practices were significantly associated with a higher suicidal ideation
16	Liu et al. [41]	China	CBCL, Family Environment Scale Chinese Version (FES-CV)	1920	Cross-sectional	6 to 16 years	SRM	Physical punishment from the parents was significantly associated with an increased risk of suicidality
17	Lo et al. [42]	Hong Kong	Perception of Parenting Style and Practices, SSI, Warmth and Acceptance Scale (WAS), Gratitude Questionnaire (GQ-6)	447	Cross-sectional	9 to 12 years	SRM	Dominating parenting style was associated with higher incidence of suicidal ideation, whereas autonomy-granting and warmth/acceptance parenting style was found to be protective
18	Madadin et al. [43]	Saudi Arabia	General Health Questionnaire (GHQ-28)	256	Cross-sectional	Medical students aged 18 to 25 years	Online SRM	Parental neglect was found to be significantly associated with increased incidence of suicidal ideation
19	Martin & Waite [44]	Australia	PBI, Youth Self Report (YSR)	681	Cross-sectional	High school students	SRM and	Lower level of parental care was significantly associated with higher level of suicidal ideation
20	Miller et al. [45]	USA		674	Longitudinal follow-up	12-18 years	Interview	The study revealed an indirect association between childhood maltreatment and suicidal ideation mediated by depression during adolescence

TABLE 1: Continued.

SN	Study	Country	Instrument	Sample size	Study design	Study population	Data collection technique	Summary of the article
21	Mitrou et al. [46]	Australia	Achenbach's CBCL	2736	Longitudinal follow-up	4-16 years Children and their carers	Survey	The study revealed inconsistent parenting style as risk factor while encouraging parenting as protective for self-harm
22	Nunes & Mota [47]	Portugal	Parenting Styles & Dimensions Questionnaire, Short version, Father/Mother Attachment Questionnaire, Suicidal Ideation Questionnaire	604	Cross-sectional	15 to 18 years	SRM	Authoritarian and permissive parenting style was significantly correlated with suicidal ideation, whereas authoritative style was negatively correlated with suicidal ideation
23	Osama et al. [48]	Pakistan		331	Cross-sectional	Undergraduate medical students	Survey	Parental neglect and demanding parenting was found to be significantly associated with increased incidence of suicidal ideation
24	Paul & Ortin [49]	USA	CBCL, Parent-Child Conflict Tactics Scale	2958	Longitudinal follow-up	Families from the Fragile Families and Child Wellbeing Study, who participated in interviews at child's ages of 3 and/or 5, and 9	Cohort Study	Parental neglect in preschool years was significantly associated with increased incidence of suicidal ideation and self-harm in middle childhood
25	Pawłowska et al. [50]	Poland		5685	Cross-sectional	16 to 19 years	SRM	Abuse from family members was associated with significantly higher incidence of self-harm behavior in adolescents
26	Sharaf et al. [51]	Egypt	PBI, SIS	150	Cross-sectional	13 to 21 years of age and hospitalized for non-fatal attempt	Interview	Suicidal intent was found to be significantly higher among adolescents who experienced parental neglect and affection less control during their childhood
27	Silove et al. [52]	Australia	PBI, Youth Self Report (YSR)	43 case; 42 control	Case-control study	Hospitalized patients after a non-fatal attempt	SRM	Paternal overprotection was associated with self-harm behavior
28	Singh et al. [53]	India	PBI, SSI, Beck's Hopelessness Scale, and Early Trauma Inventory Self Report	436	Cross-sectional	Undergraduate students of 18 to 25 years	Interview	Suicidal ideation was significantly higher in affection less parental control
29	Smith & Moore [54]	Jamaica	Massachusetts Youth Screening Instrument	563	Cross-sectional	11 to 19 years	SRM	Authoritarian parenting style was found to be significantly associated with greater risk of suicidal ideation
30	Sun et al. [55]	China		2198	Cross-sectional	Medical undergraduate students	SRM	Mother's communication was associated with lifetime suicidal ideation and plan but associated with suicidal attempt. The study does not reveal any direction of the association



TABLE 1: Continued.

SN	Study	Country	Instrument	Sample size	Study design	Study population	Data collection technique	Summary of the article
31	Zaborskis et al. [56]	Lithuania	Health Behavior in School-aged Children (HBSC)	3572	Cross-sectional	13 to 15 years	SRM	Authoritarian-repressive paternal parenting style, permissive-neglectful maternal parenting style and low parental emotional support was found to be significantly associated with suicidal behavior
32	Zinchuk et al. [57]	Russia	Self-Injurious Thoughts and Behavior Interview (SITBI)	361	Retrospective cohort	Hospitalized patients in psychiatry	Interview	Dissatisfaction with perceived parenting style (with respect to their upbringing, selecting from balanced, overprotective, uninvolved and inconsistent types) was found to be significantly associated with suicidal ideation

suicidal behavior; while greater parental involvement decreased suicidal behavior to some extent, after a certain level, the relationship reversed. Parental involvement, in this context, refers to levels of parental monitoring and regulation of child's behavior. These results imply that whereas an optimal amount of parental support and involvement may serve to buffer stress, too much of it may undermine autonomy and self-efficacy, threatening psychological health and outcomes.

Globally, suicide is a leading cause of death among adolescents and young adults aged between 15 and 29 years [9]. Recent reviews that focused on developments in epidemiology and risk factors for youth suicide have consistently highlighted the etiological role of family factors such as quality of the parent-child bonding, childhood maltreatment, family strife, and parental psychopathology in adolescent suicidal behavior [14]. Findings from the Global School-based Health Survey (GSHS) that explored the association between parent-child relationship and adolescent suicidality in more than 50 countries worldwide also concluded similarly; an adolescent's positive perceptions about parenting had a protective effect on suicidal behavior [15]. Further, the authors also found some evidence for gendered effects in this relationship; the protective effects of parent-child relationship on suicidality were marginally stronger among girls than boys. Interestingly, in low-income countries, compared to middle- and high-income countries, the quality of parenting exerted lesser effects on adolescent suicidal behavior. Evidence suggests that authoritarian and rejecting-neglecting parenting styles are associated with an increased risk of suicidal behavior [16].

The stress-diathesis model of suicide provides a theoretical basis for understanding both the positive and negative influence of parenting on youth suicidal behavior. Simply put, this model conceptualizes suicidal behavior as emerging from an interaction between the individual vulnerability, or diathesis, and exposure to stressors, such as stressful life events or psychiatric morbidity [17]. Early childhood experiences, that are linked to parenting, such as low levels of parental warmth, rejection, and inconsistent parenting are tied to insecure attachment and negative emotions in children, both of which have been identified as risk factors for subsequent suicidal behavior [18]. In individuals with such a preexisting diathesis, negative parenting practices such as maltreatment and harsh punishment may act as stressors that precipitate suicidality among those who are vulnerable (diathesis) [19]. Simultaneously, robust parenting may act as a protective factor to moderate the negative effects of stressful life events on the development of suicidal ideation [20].

The association between parenting practices and adolescent suicidal behavior continues to be an under-researched area with evidence from high-income countries dominating the available literature. The present review attempts to synthesize the available global evidence and seeks to explore the links between parenting practices, beyond the well-known four parenting styles, and youth suicidal behavior with the goal of enriching the evidence regarding possible risk or protective factors for adolescent suicidal behavior. This may also provide an evidence base for conceptualizing

and testing the efficacy of interventions targeting these factors on suicidal behavior in this group.

From this perspective, the major findings of the present review merit a discussion. Firstly, though the bulk of the available evidence implicates the role of authoritarian parenting in suicidal behavior, one study also showed that authoritarian parenting mitigates suicidal risk [21]. It is noteworthy that the latter study found a race and age specific moderating effect of parenting style on children's suicidal risk; while authoritarian parenting attenuated the relationship between depressive symptoms and suicidal risk among older children and those of Afro-American descent, such a relationship was not true for Caucasian and younger children. This is an important finding which suggests that the effects of parenting practices on suicidal behavior among youth may vary across racial and ethnic settings. On the same token, readers may note earlier research findings suggesting that authoritarian parenting practices foster positive psychological adjustment among poor Afro-American children [22], this is in direct contrast to findings among children in general, including Asian settings [23, 24]. The message here seems to be that, authoritarian parenting may be perceived differently by children of different ethnicities and this may, in turn, yield differential effects on psychological adjustment and suicidal risk among children.

The other parenting style less frequently associated with youth suicidal behavior was permissive parenting. Permissive parenting, particularly paternal, may negatively influence the quality of attachment and emotional bonding with parents, and contribute to the development of suicidal ideation among children [25]. In terms of parental overprotection, one study showed its curvilinear relationship with suicidal ideation; specifically, parental overprotection reduces suicidal ideation only to a certain limit while excessive parental oversight can have deleterious consequences on suicidal behavior [26]. Prior research has shown that overprotective parenting can diminish personal autonomy, reduce self-efficacy, and undermine subjective well-being [27].

In addition, the present review has identified a host of parenting factors such as inconsistent parenting style, parental overprotection, neglect, abuse or maltreatment, low levels of parental warmth and affection, and perceived dissatisfaction with parenting as being linked to adolescent suicidal ideation and behavior. While we have not estimated the strength of these associations, our findings will inform therapeutic and preventive work with adolescents experiencing suicidal ideation as well as their families. Interventions targeting the above parenting factors should be developed and tested for their efficacy in reducing high risk behavior in this group.

In this regard, a recent, influential meta-analysis that sought to quantify the impact of psychological therapeutic interventions in mitigating suicidal and nonsuicidal behavior among adolescents found that effective interventions such as cognitive-behavior therapy and mentalization-based therapy had larger effect sizes when family level interventions were also included [28]. Given this evidence, our results may help to identify parenting practice targets for refining and enhancing the efficacy and effectiveness of



therapeutic interventions. Based on available evidence, there is a basis for incorporating positive parenting practices into universal prevention and health promotion strategies through public health messaging and imparting training on good parenting practices [29].

**4.1. Strength and Limitations.** This is the first initiative to synthesize the available evidence with an aim of determining the association between parenting style and suicidal behavior. However, several limitations should be considered. Firstly, the number of studies was relatively small that hinders the replication and generalization of findings. Secondly, there is an extreme heterogeneity among the studies in regards to the study design, measuring instrument, sample size, and study settings that may challenge the generalization of study results. Thirdly, the role of culture was not adjusted in the studies as parenting style varies from culture to culture. Fourthly, the majority of the studies are from high-income countries that hinder the generalization of results.

## 5. Conclusions

It can be opined that the association of parenting style and suicidal behavior is an understudied area. Further, well-designed studies are warranted to assess the relationship. This focused review identified the supportive notion that authoritarian and childhood neglects have an association with suicidal behavior in adolescence, and later life. However, a prudential judgment is warranted due to the heterogeneity of study methods, population, contexts, and measurement tools.

## Data Availability

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

## Conflicts of Interest

The authors declare there is no conflict of interest.

## Authors' Contributions

SMY Arafat was responsible for conceptualization, data curation, methodology, investigation, formal analysis, project administration, supervision, validation, writing, reviewing, and editing. M Dinesh was responsible for data curation. V Menon and R Kabir were responsible for writing, reviewing, and editing.

## Supplementary Materials

supplementary file 1. Stepwise article selection is mentioned in Figure 1. (*Supplementary Materials*)

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