Discover Psychology





Parenting style and its effect on eating disorders and substance abuse across the young population

Shalina Ramsewak¹ · Numrata Moty² · Manish Putteerai³ · Jhoti Somanah³ · Loung-Poorunder Nirmala³

Received: 16 October 2021 / Accepted: 17 January 2022

Published online: 31 January 2022 © The Author(s) 2022 OPEN

Abstract

This article attempts to examine the occurrence of two behavioural changes, namely, substance abuse and eating disorders in order of onset mediated by ineffective parenting styles during young age. The four parenting styles and their consequential behavioural adverse effects are taken as the focal point of this study and are synthesized to provide an outlook on the status of ineffective parenting and deviant offspring behaviours. A review of literature was primarily undertaken to examine the characteristic features of ineffective parenting. A causal relationship was then drawn between the onset of behavioural disorders with an emphasis on substance abuse and eating disorders, along the parenting spectrum. We probed into the order and directionality of the offspring behavioural changes against ineffective parenting. The current available data shows the superimposition of the parenting style spectrum on a bell-shaped distribution of behavioural outcomes as exemplified by authoritarian, permissive and neglectful parenting as a prime determinant of several disorders among the young age; parenting styles being at the extremities of the parenting spectrum. The sweet spot of parenting, mainly associated to the authoritative approach, bears the most positive effect on the growing child. The extreme ends of parenting as per the varying degree of responsiveness and demandingness, generally observed in authoritarian and neglectful parenting precipitate concomitant deviant behaviours cascading from one another; intricately linking substance abuse and eating disorders. A number of studies describe the isolated effects of ineffective parenting on the development of substance abuse and eating disorders during the adolescent period. However, the relationship between both eating disorders and substance abuse is underplayed and need to be stressed upon to tailor behaviour-specific targeted therapies and restore the normalcy of these altered behaviours.

Highlights

- How the parenting style adopted can lead to a concurrent amalgam of disordered eating patterns and substance abuse.
- How disordered eating behaviours and substance abuse are initiated as coping strategies to deal with the consequences of poor parenting.
- Isolation of specific risk factors to deter the development of those deviant behaviours in addition to improvement of parenting methods.

Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s44202-022-00025-7.

Manish Putteeraj, mputteeraj@umail.utm.ac.mu | ¹Psychiatry Department, A.G. Jeetoo Hospital, Port-Louis, Mauritius. ²Faculty of Law, University of Mauritius, Reduit, Mauritius. ³School of Health Sciences, University of Technology, Port-Louis, Mauritius.



Discover Psychology

(2022) 2:9

| https://doi.org/10.1007/s44202-022-00025-7



Keywords Parenting style · Eating disorders · Risk factors · Parenting dimensions · Substance abuse · Coping strategy

Abbreviations

AN Anorexia nervosa

EMS Early maladaptive schemas

OR Odds ratio

SES Socio-economic status SNS Social networking site

1 Background

Understanding parenting and its variants have been critical to enhance the quality and approach taken towards the upbringing of children, with a focus on the values instilled that deter the potential attraction towards social plagues. Although parenting is inexhaustive, the effect of parenting is limited to children aged under 18 years, aligning with the age group for parenting studies [4]; hence, herein after, the young population refers to children prior to 18 years of age. Common parenting styles, namely, authoritarian, authoritative, permissive and uninvolved/neglectful exert their effects based on a continuum of responsiveness and demandingness (Fig. 1) [8, 127]. Authoritarian households consist of authority-driven parents with rigid sets of rules and limited display of affection between parents and child versus warm and responsive authoritative parents with well-defined rules and punishments; permissive parents are indulgent, lenient and affectionate with a lack of direction; while neglectful parents are uninvolved and devoid of direction and warmth [9]. Authoritative versus authoritarian parenting appears to be the most adequate approach as reported by enhanced academic achievement [56], healthy psychological and behavioural functioning [71] as well as good eating habits [117]. Baumrind's model holds many similarities to individual psychological parenting models; imposing authoritative and democratic styles as benefactors over either autocratic or permissive approaches to parenting [36, 94, 107].

2 Ineffective parenting and its triggers

Three fundamental dimensions shaping the characteristics of parenting are "warmth versus rejection, structure versus chaos, and autonomy versus coercion" [108, 122]. Warmth determines whether the child feels accepted or rejected by the parents; forging the bond between the child and parents [111]. Structure, in contrast to chaos, represents clear and fair demands while coercion intimidates the child to obey compared to autonomy, the latter reflected by the child's ability to explore his or her uniqueness [122]. Hence, ineffective parenting predominantly involves a high level of coercion and chaos which is mainly present in dysfunctional households governed by authoritarian and permissive parents [81, 91]. Features of low warmth and variable structure levels are observed in authoritarian and neglectful parents [73]; thereby acknowledging the authoritative style as the most effective parenting method given its protective effect on the child and positive involvement during the child growth mediated by high levels of warmth, structure and psychological autonomy [2, 73, 76, 82]. This is further supported by the detrimental effects of a chaotic household on the socio-emotional adjustments of children [43, 78]. In addition to these three dimensions, researchers also argue that parental incongruency which refers to the opposing parenting style adopted by the individual parents in the same household, can lead to ineffective parenting [45]; and may lead to higher participation in anti-social behaviours in the young aged [131].

Age [79], socio-economic status (SES) [113], mental health [113] and social support [106] of parents are elemental in managing the parenting dimensions and simultaneously affecting the child's psychosocial development [98]. SES has a multi-factorial effect on the growth of a child, ranging from cognitive stimulation activities and socialisation to parental actions and social interactions [61, 138]. Authoritarian parents from a low SES, holding blue-collar jobs impose strict obedience as a basic requirement [119] in contrast to those originating from high SES households who prone independence [52]. Chronic parental mental health problems consequentially lead to harsh parenting experiences, aberrant interpersonal relationships and increased stress levels which incrementally and cumulatively affect the child [110]. Wang et al. [135] report that poor parental mental health has significant impact on their parenting styles with significant repercussions on their children's mental health. Depression is closely associated with neglectful parenting [40]. Parents



diagnosed with social anxiety disorder tend to be less warm and affectionate towards their offspring [22]. Negative parent–child interaction is also observed in parents suffering from bipolar disorder [32, 57, 120].

The intricate relationship between SES, mental health and parenting style, as investigated by Topham et al. [129], predicts an increased likelihood of irregular offspring behaviour induced by permissive depressed mothers versus non-depressed authoritarian ones. This concurs to a certain extent with the 'maternal maturity hypothesis' stating that younger mothers are less likely to provide their children with skilled and appropriate parenting, leading back to SES and parenting style [17, 70].

3 Consequential effects of ineffective parenting

A good family environment is central to the proper development of children, with parents having the paramount responsibility to discipline the child to mediate a successful transition into adulthood [37]. Permissive parenting induces a higher probability of low self-esteem, educational difficulties, school delinquency, and substance use in children [109]. Conversely, strong parental support and autonomy as depicted by authoritative parenting leads to higher self-esteem and life satisfaction, lower depression [28, 44, 88, 93, 100], and positively impacts adolescents' educational achievement [56]. Permissive parenting potentially increases the likelihood of engaging in impulsive behaviours such as alcohol abuse [6]; risky sexual behaviour especially among females [38]; and heightened display of disruptive behaviours by males [105] due to the lack of parental behaviour control [121]. Children living with authoritarian parents are more likely to encounter interpersonal problems, resulting from a declining self-confidence and an increased prevalence of depressive states [88, 114]. A meta-analysis conducted by Hoeve et al. [51] validated the onset of criminal behaviour among the changes reflected in children raised by neglectful parents, further substantiated by social disorganization and poor parental-offspring social transactions. This adds to traits of emotional withdrawal, fearfulness, anxiety, and poor academic performance, with increased risk of substance abuse in such families [33] due to the lack of family cohesion [96].

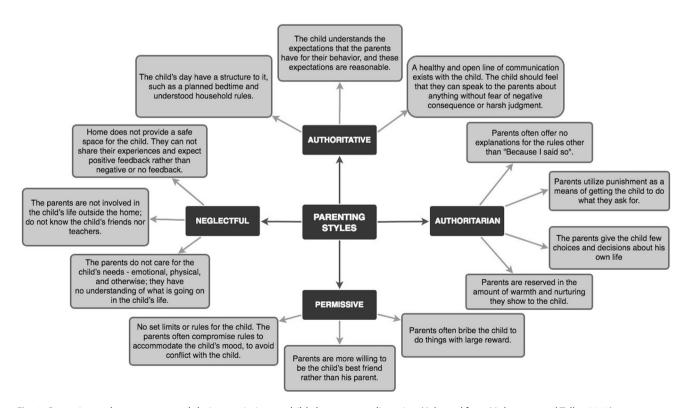


Fig. 1 Parenting styles spectrum and their association to child closeness or alienation (Adapted from Mgbemere and Telles, 2013)



3.1 Parenting styles and eating disorders

Eating disorders are characterized by chronic disturbance in the eating patterns of an individual along with significant distress in the important areas of functioning [39]. Disordered eating habits include frequent unhealthy dieting, laxative use, binge-eating, caloric restriction, anorexic and bulimic behaviours [1]. Past studies have successfully demonstrated the predominant onset of disordered eating habits at a young age [74] which tends to persist into adulthood [99]. Obesity among children is considered to be an 'epidemic' given its sharp inclined prevalence. Disordered eating habits are gender-specific, affecting more females than males [68, 126]. Biologically, women have a lower rate of basal fat oxidation which promotes more fat storage; contributing to disordered eating behaviours [16]. Objectification of the female gender is thought to be a mediating factor of eating disorders as reflected by a rise in thin waistline adoption [68]. This phenomenon prevails as a result of the sexualisation of women's bodies and the evaluation of their self-worth based on their appearance and/or bodies when contrasted against body ideals portrayed across social media [3]. Hence, women resort to different strategies including disordered eating behaviours to achieve the ideal body [132].

Isolation of a single factor as the trigger for disordered eating behaviour is not permissible. Internal triggers such as genetic predisposition, neurobiological mechanisms inclusive of cognitive and behavioural attributes can be potential risk factors [83, 102]. External factors modulating the prevalence of disordered eating habits refer to sociocultural traits such as societal and mass media pressure particularly through Social Networking Sites (SNS) [77], which more than often tips the cultural standards towards 'size zero' features [68].

Importantly, parental psychological conditioning is not limited to the cognitive and behavioural characteristics of a child but also co-extends to the physiological and metabolic features [14, 115]. In recent years, there has been a growing interest probing into the association between parenting style and eating disorder (Table 1). The development of an irregular eating pattern can be induced by parenting [14, 25]. The authoritarian and permissive styles are more significantly linked with eating disorders in contrast to authoritative parenting [49]. Indeed, a recent review of literature by Kiefner-Burmeister and Hinman [64] has demarcated authoritative parenting as being protective of obesity in children and supportive of healthy eating habits. Children are more likely to develop disordered eating habits if the fatherly figure is perceived as authoritarian over authoritative [41]. According to Momeni and Amiri [92], there is a significant negative relationship between the authoritative style of parents and anorexia nervosa (AN) among female adolescents [18]; hence endorsing the relationship between parental warmth and good eating behaviour. Alternately, incongruent parenting patterns have been linked to obesity in adolescents as reflected by a deregulation of the eating patterns related to contradictory responses to eating cues from the parents [13]. Incongruency can also trigger disordered eating behaviour, with adolescents indulging unhealthy snacking, if the mother and the father adopt contrasting parenting styles [45]. Being on the low end of parental control, permissive parenting style is often considered as being the over-indulgent parenting style, leading to a higher risk of eating disorders [49, 116]. Binge-eating practice in females is more prominent when authoritarian (17.1%) and permissive (10.7%) parenting styles are adopted versus authoritative parenting (8.3%) [139]. This synthesis of literature on eating disorders and parenting anchors authoritative parenting as a mitigator versus the remainder ineffective parenting styles as potentiators.

3.2 Substance abuse in the Young population

Substance abuse has reached a critical status across the global population transcending the transboundary barriers. There has been a growing concern with regards to adolescents inclined towards substance abuse as early as 13 years of age [62, 136]. The psychoactive substances consumed vary from the ten classes of drugs and other unknown substances which altogether have the ability to modulate the reward system; tempering with the normal neurobiological development of the mesolimbic and mesocortical circuitry to alter behaviour [128].

Substance abuse develops over a spatio-temporal scale and is mediated via social transmission; the latter referring to the wilful participation of the host in the process. For instance, there is an increased risk of substance abuse initiation if one spouse in a family household is registered as a user [63]. The temporal nature of substance abuse is best described using the 'Gateway Drug Theory', which defines the addiction process as an escalation from alcohol, tobacco or cannabis to more addictive psychoactive substances during later life stages [101]. This theory applies primarily to the adolescent years as reported by Kirby and Barry [65] with 12th grade students shifting towards illicit drugs during adulthood after being exposed to tobacco and cannabis. Gender-based differences in substance abuse are also highly prevalent although the gender gap appears to narrow down when comparing adolescent girls and boys [84]. Men are twice at risk to indulge



Table 1 Connecting parenting styles and eating disorders

(2022) 2:9

Authors	Findings
Klesges et al. [66]	↑ Effects of parental monitoring (threats and actual) on 53 children's obesity status, ↓ calorie intake and non-nutritious food
Wake et al. [134]	↑ Paternal control ↓ BMI while, ↑ Parental neglect and permissiveness leads to ↑ BMI
Olvera and Power [104]	Mexican American children: ↑ Maternal indulgence, ↑ risk of obesity
Sleddens et al. [123]	Children from authoritative parenting had ↑ healthy eating patterns and ↓ BMI, compared to children from neglectful, permissive and authoritarian parenting
Johnson et al. [59]	Parents of Anorexics; Mother were ↑ critical and dominating (authoritarian) and father were ↑ permissive
ngoldsby et al. [58]	Neglectful parenting, ↑ chances of developing bulimia
Depestele et al. [35]	Household with ↑ maternal control (authoritarian), ↑ binge-eating purging behaviours

in substance abuse as compared to women, the latter who progress faster from initial exposure to substance use disorders through telescoping [29, 69, 72].

The complexity of substance abuse as a mental disorder is attributed to the interplay of various genetic and environmental risk factors [60]; however, the prevention of the disorder at a young age is plausible by cushioning the modifiable risk factors [48]. Imitation and social learning as part of the environmental risk factors can promote substance use disorders [124]. Lack of communication and support [26], parental drug abuse [53], social disorganisation [19], academic failure [31] and rejection by peers [87] are the most common determinants observed in substance abusers. Family functioning, through the involvement and emotional expressiveness of the parents, has proved to be elemental in attenuating the risk of substance abuse in the offspring [26]. Low SES households where parental guidance is poorly observed throughout adolescence increase the affinity towards negative peers [24]; statement in line with Mendez et al. [87] showing that adolescents become victims of drug abuse as a means to peer group submission or acceptance. The contrary, i.e., peer rejection leading to increased psychological stress and consequential substance abuse among adolescents also stands true [31]. The inter-relationship among these factors termed as gene-environment correlation [67] may precipitate substance use disorders.

3.3 Parenting styles and substance abuse

Adolescence is a critical period of life during which, vulnerability to substance use disorders may be stimulated [133]. Parenting styles influence children in their decision-making process across adolescence; hence, control to a certain extent, the exposure to illicit substances [12]. If protective factors boosting self-efficacy and self-esteem among other characteristics within the parenting style adopted are present, the onset of substance use disorder can be mitigated; while the opposite also remains for ineffective parenting [137].

Authoritative parenting is considered to be the ideal method to nurture maturity and generate the best results in terms of the lowest substance abuse rates [10, 12]. It relies on consistent discipline, warmth and sensitivity towards their children, which exerts a positive force on the growing children and culminates in both parent and child communicating on the same wavelength [20]. Children victims of harsh punishment by authoritarian parents have an increased risk of using substances as a coping mechanism [12]. Permissive parenting serves as a good predictor of adolescent substance abuse given the indulgent nature of the parents and the lack of behavioural demands from the child leading to poor outcomes with respect to substance abuse [21, 118]. Neglectful parents fail to set limits and do not provide their children with adequate warmth, rendering them more vulnerable to substance abuse [10]. A Brazilian prospective study involving 99 adolescents reported 30% and 28% respondents exposed to authoritative and neglectful parenting respectively; with adolescents from the latter having more trouble abstaining from substance abuse [11]. These findings align with reports from Martínez-Loredo et al. [80] demonstrating a strong link between neglectful parenting and adolescent alcohol abuse with an odds ratio (OR): 2.14; 95% confidence interval (CI): 1.18–3.86 (p = 0.012). The ascending order of substance abuse predictability with respect to parenting style can be inferred to be authoritative, authoritarian, permissive and neglectful, the latter being the most potent precipitator of substance abuse among the young population [97]. Through the extensive research undertaken linking parenting and substance abuse, the modifiable risk factors leading to this deviant behaviour is almost entirely englobed by the parenting style adopted within the household and plays a prominent role in guiding the trajectory of the child's development.



4 Connecting the dots between ineffective parenting styles, substance abuse and eating disorders

Discover Psychology

Eating disorders and substance abuse is exclusive in some adolescents but can exist simultaneously as supported by the strong correlation between eating disorders and substance abuse [15, 46]. Approximately 50% of individuals with eating disorders also abuse alcohol or illicit drugs [112]. Similar findings have been documented by Denoth et al. [34] in a crosssectional study involving 33,185 Italians aged between 15 and 19 years old; with a higher proportion of abnormal-weight respondents (20-40%) abusing illicit substances over the normal population. Both eating disorders and substance abuse are used to numb away emotional distress, anxiety, depression, apprehension and psychological trauma; and serves as a coping mechanism for pain control [5,55]. Children exposed to acute or chronic stressors related to weight gain resort to substance abuse as a remedial action to suppress appetite [54]. Alternately, studies have shown that binge eating is often accompanied by heavy alcohol consumption as a coping strategy during unpleasant situational events [5]. Interestingly, the risk of developing substance dependence or abuse is 3.4 times higher in subjects engaged in recurrent binge eating versus normal participants [89]. Women diagnosed with AN during their adolescence are more prone to develop alcohol-related problems which appear to persist over adulthood even if the eating disorder is treated [95]. Overlooking the myriad of common environmental and genetic factors between both behavioural disorders, parenting style appears to be a key determinant and trigger to substance abuse and eating disorders [83].

A longitudinal study conducted by Chen et al. [27] from 1989 to 2004 involving 16,882 participants provided critical data related to positive parenting and its inhibitory effects on eating disorders and substance use. The findings revealed a positive association between the authoritative approach characterized by a consolidated parent-child relationship and offspring satisfaction, and a lower risk of eating disorders and marijuana use, while promoting good physical and mental well-being. The data concurred with Enten and Golan [41] stating that dietary habits and body image are affected by parenting, familial milieu, parent-child bonding and communication. Haines et al. [47] demonstrated a low association (AOR = 0.73, CI = 0.60-0.88) between highly functioning families and obesity among the children, and Hock et al. [50] posited the father-youth bonding to be of utmost importance in shielding against substance abuse.

Parenting styles are also intricately linked to early maladaptive schemas (EMS) which can consequentially lead to eating disorders and substance abuse. Permissive parenting is positively associated with the development of EMS which may promote psychosocial outcomes inclusive of eating disorders [23] and addiction [7]. Contrastingly, the authoritative style negatively correlates to the generation of EMS given the relative absence of household characteristics of rejection, abuse, and instability among others [42]. Although beyond the purview of this review, the EMS dimension related to the other characteristics of parenting and its impacts on psychosocial behaviours could be further explored as supporting elements to the concept of 'wrong' parenting and adverse child development.

5 Conclusion

This review critically portrays the different dimensions of parenting and focuses on the styles which precipitate aberrant behaviours inclusive of eating disorders and substance abuse. Parenting forms the basis of the psychological development of a child. It can be considered as a yardstick to shape and prepare the offspring to face the future challenges in life by developing good self-esteem and coping strategies which are primordial in problem-solving and decision making in later life for the betterment and well-being of the child [86]. Parental warmth and control are of utmost importance in preventing substance abuse in children [50]. There has been strong evidence showing a link between 'bad' parenting practices during the early childhood developmental stages to the onset of eating disorders and substance abuse [75]. However, parenting being multi-dimensional, characteristics such as parenting practices, discipline strategies and parental psychopathology involved in the child development cannot be disregarded [85]; along with its consequential effects on the child habits including substance abuse and eating disorders.

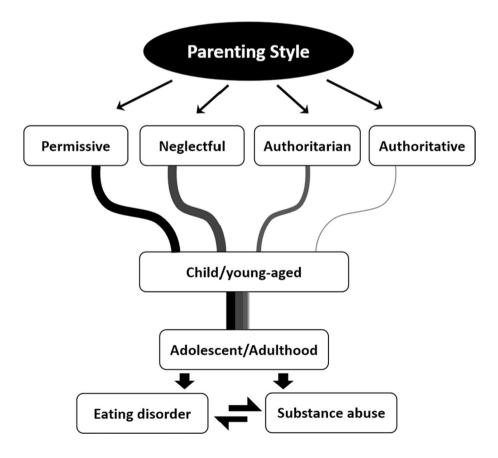


6 Research gap and future direction

The present study tackles the influence of the different parenting styles on young individuals' proneness to develop eating disorders or substance use disorders. Although at this stage, ineffective parenting and the ranked occurrence of the mentioned behavioural disorders, i.e., order of onset between eating disorders and substance abuse cannot be determined, it can be inferred that the cascading effect of one condition may lead to the other in adolescents. Data highlighting those two simultaneous deviant behaviours remains scarce to this date and requires more attention across the scientific community to precipitate the demand for parenting training programs (PTPs) which is limited in the societal sphere. PTPs can be multi-dimensional with the inclusion of early signs detection towards deviant behaviour, regulation of parental behaviour and characteristics, as well as behavioural family interventions to enhance communication strategies and effects, while creating more conducive environments within households to nurture healthy development. The level of influence of individual parenting styles, i.e., the tolerable threshold to trigger those behavioural disorders still remains unclear given the potential hybridization across the variants; but permissive and neglectful parenting appears to be much more influential in both cases (Fig. 2). Importantly, this review focused on conventional households and has not taken into consideration the aspect of inclusivity whereby same-sex parents, co-parenting and re-composed families might act as potent co-factors and reflect different degrees while alternating parenting style adoption.

In recent years, helicopter parenting, coined by Cline and Fay [30] seemed to have gained some ground. This style of parenting, consisting of "hyper-involvement" in children's activities, has been associated with poor social skills and self-efficacy [125]. This particular finding is interesting, for recent studies show that indulgent/permissive parenting seems to result in more positive outcomes in youngsters with higher self-esteem and good educational performance [11], shedding more light on the degree of responsiveness required and also the developmental time-frame for such variation. The social fabric has witnessed changes of the highest magnitude with the drastic measures imposed by multiple countries since the coronavirus (Covid-19) outbreak in 2020 which may seem to favor permissive parenting style as reported by the positive effects on the behavioural traits in Japanese children [90]. However, the conventional authoritarian style remains connected to negative outcomes such as the child's mental health, screen time and sleep quality among others [103]. 'Forced' parental involvement during the pandemic over the extended

Fig. 2 Exposure of the youngaged to differential parenting styles and behavioural consequences during adolescence/adulthood stages





durations of quarantine and confinement has been an 'eye opener' for many, mostly in determining the efficiency of their parenting styles and effect on their children's performance and behaviour [130]. The impact of such Covid-19 social measures warrants further research on multiple fronts when it comes to the young population and behaviours inclusive of eating habits and substance use as well as the hybridization of parenting styles and potential observed changes in parenting as a result of the 'new normal'.

Acknowledgements Not applicable.

Authors' contributions SR and NM contributed equally in writing the manuscript. MP, JS were involved in the editing and internal review of the initial draft provided. LPN provided her expertise in the conception of the theme. All authors read and approved the final manuscript.

Funding This study was not funded by any local or external agencies.

Availability of data and materials Data sharing is not applicable to this article as no datasets were generated or analysed during the current study.

Declarations

Ethics approval and consent to participate Ethical clearance was not required for this study.

Consent for publication Not applicable.

Competing interests The authors declare that they have no competing interests.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

References

- 1. Ackard DM, Neumark-Sztainer D, Story M, Perry C. Overeating among adolescents: prevalence and associations with weight-related characteristics and psychological health. Pediatrics. 2003;111(1):67–74.
- 2. Adamczyk-Robinette SL, Fletcher AC, Wright K. Understanding the authoritative parenting-early adolescent tobacco use link: the mediating role of peer tobacco use. J Youth Adolesc. 2002;31(4):311-8. https://doi.org/10.1023/A:1015401718682.
- 3. Aparicio-Martinez P, Perea-Moreno A-J, Martinez-Jimenez MP, Redel-Macías MD, Pagliari C, Vaquero-Abellan M. Social media, thin-ideal, body dissatisfaction and disordered eating attitudes: an exploratory analysis. Int J Environ Res Public Health. 2019;16(21):4177. https:// doi.org/10.3390/ijerph16214177.
- 4. Areepattamannil S. Parenting practices, parenting style, and children's school achievement. Psychol Stud. 2010;55:283-9. https://doi. org/10.1007/s12646-010-0043-0.
- 5. Arias JE, Hawke JM, Arias AJ, Kaminer Y. Eating disorder symptoms and alcohol use among adolescents in substance abuse treatment. Subst Abuse. 2009;3:81-91.
- 6. Bahr SJ, Hoffmann JP. Parenting style, religiosity, peers, and adolescent heavy drinking. J Stud Alcohol Drugs. 2010;71(4):539-43.
- 7. Bakhshi Bojed F, Nikmanesh Z. Role of early maladaptive schemas on addiction potential in youth. Int J High Risk Behav Addiction. 2013;2(2):72-6. https://doi.org/10.5812/ijhrba.10148.
- 8. Baumrind D. Child care practices anteceding three patterns of preschool behaviour. Genet Psychol Monogr. 1967;75(1):43–88.
- 9. Baumrind D. The influence of parenting style on adolescent competence and substance use. J Early Adolescence. 1991;11(1):56–95. https://doi.org/10.1177/0272431691111004.
- 10. Becona E, Martínez U, Calafat A, Juan M, FernándezHermida J, Secades-Villa R. Parental styles and drug use: A review. Drugs. 2011;19:1–10. https://doi.org/10.3109/09687637.2011.631060.
- 11. Benchaya MC, Moreira TDC, Constant HMRM, Pereira NM, Freese L, Ferigolo M, Barros HMT. Role of parenting styles in adolescent substance use cessation: results from a brazilian prospective study. Int J Environ Res Public Health. 2019;16(18):3432. https://doi.org/10. 3390/ijerph16183432.
- 12. Berge J, Sundell K, Öjehagen A, Håkansson A. Role of parenting styles in adolescent substance use: results from a Swedish longitudinal cohort study. BMJ Open. 2016;6(1): e008979. https://doi.org/10.1136/bmjopen-2015-008979.
- 13. Berge JM, Wall M, Bauer KW, Neumark-Sztainer D. Parenting Characteristics in the Home Environment and Adolescent Overweight: A Latent Class Analysis. Obesity (Silver Spring, Md). 2010;18(4):818–25. https://doi.org/10.1038/oby.2009.324.
- 14. Birch LL, Fisher JO, Davison KK. Learning to overeat: maternal use of restrictive feeding practices promotes girls' eating in the absence of hunger. Am J Clin Nutr. 2003;78(2):215-20. https://doi.org/10.1093/ajcn/78.2.215.



- 15. Bisetto Pons D, Botella Guijarro A, Sancho Munoz A. Eating Disorders and drug use in adolescents. Adicciones. 2012;24(1):9–16.
- 16. Blaak E. Gender differences in fat metabolism. Curr Opin Clin Nutr Metab Care. 2001;4(6):499-502.
- 17. Boivin J, Rice F, Hay D, Harold G, Lewis A, van den Bree MMB, Thapar A. Associations between maternal older age, family environment and parent and child wellbeing in families using assisted reproductive techniques to conceive. Soc Sci Med. 2009;68(11):1948–55. https://doi.org/10.1016/j.socscimed.2009.02.036.
- 18. Bolghan-Abadi M, Sayed A, Kimiaee F, Amir (2011) The Relationship between Parents' Child Rearing Styles and Their Children's Quality of Life and Mental Health (Vol. 02).
- 19. Brenner AB, Bauermeister JA, Zimmerman MA. Neighborhood variation in adolescent alcohol use: examination of socioecological and social disorganization theories. J Stud Alcohol Drugs. 2011;72(4):651–9.
- 20. Brewer BR (2017) How Parenting Style Relates to Adolescent Substance Abuse in an At-Risk Male Population. (Degree of Bachelor of Psychology B.A), The University of Southern Mississippi The University of Southern Mississippi. https://aquila.usm.edu/cgi/viewcontent.cgi?article=1479&context=honors_theses
- 21. Brosnan T, Kolubinski DC, Spada MM. Parenting styles and metacognitions as predictors of cannabis use. Addict Behav Rep. 2020. https://doi.org/10.1016/j.abrep.2020.100259.
- 22. Budinger MC, Drazdowski TK, Ginsburg GS. Anxiety-promoting parenting behaviours: a comparison of anxious parents with and without social anxiety disorder. Child Psychiatry Hum Dev. 2013;44(3):412–8. https://doi.org/10.1007/s10578-012-0335-9.
- 23. Buri JR, Post MC, Alliegro MC (2018) Parental Authority and Early Maladaptive Schemas. Online Submission.
- 24. Byrnes HF, Miller BA, Chen M-J, Grube JW. The roles of mothers' neighborhood perceptions and specific monitoring strategies in youths' problem behaviour. J Youth Adolesc. 2011;40(3):347–60. https://doi.org/10.1007/s10964-010-9538-1.
- 25. Canals J, Sancho C, Arija MV. Influence of parent's eating attitudes on eating disorders in school adolescents. Eur Child Adolesc Psychiatry. 2009;18(6):353–9. https://doi.org/10.1007/s00787-009-0737-9.
- 26. Chakravarthy B, Shah S, Lotfipour S. Adolescent drug abuse awareness & prevention. Indian J Med Res. 2013;137(6):1021-3.
- 27. Chen Y, Haines J, Charlton BM, VanderWeele TJ. Positive parenting improves multiple aspects of health and well-being in young adult-hood. Nat Hum Behav. 2019;3(7):684–91. https://doi.org/10.1038/s41562-019-0602-x.
- 28. Chiew L. A Study Of Relationship Between Parenting Styles and Self-Esteem: Self-Esteem's Indicator Parenting Styles. New York: University TunkuAbdul Rahman; 2011.
- 29. Choo EK, Beauchamp G, Beaudoin FL, Bernstein E, Bernstein J, Bernstein SL, Boudreaux ED. A research agenda for gender and substance use disorders in the emergency department. Acad Emerg Med. 2014;21(12):1438–46. https://doi.org/10.1111/acem.12534.
- 30. Cline FW, Fay J. Parenting with Love and Logic: Teaching Children Responsibility. Colorado Springs CO: Pinon Press; 1990.
- 31. Crosnoe R. The connection between academic failure and adolescent drinking in secondary school. Sociol Educ. 2006;79(1):44–60.
- 32. Daches S, Vine V, Layendecker KM, George CJ, Kovacs M. Family functioning as perceived by parents and young offspring at high and low risk for depression. J Affect Disord. 2018;226:355–60. https://doi.org/10.1016/j.jad.2017.09.031.
- 33. Darling N. Parenting Style and Its Correlates. 1999.
- 34. Denoth F, Siciliano V, Iozzo P, Fortunato L, Molinaro S. The association between overweight and illegal drug consumption in adolescents: is there an underlying influence of the sociocultural environment? PLoS ONE. 2011;6:11.
- 35. Depestele L, Soenens B, Lemmens GMD, Dierckx E, Schoevaerts K, Claes L. Parental autonomy-support and psychological control in eating disorder patients with and without binge-eating/purging behaviour and non-suicidal self-injury. J Soc Clin Psychol. 2017;36(2):126–41. https://doi.org/10.1521/jscp.2017.36.2.126.
- 36. Dinkmeyer DCM. STEP-- systematic training for effective parenting. 1997.
- 37. Dishion T, French D, Patterson G. The development and ecology of antisocial behaviour. 2018.
- 38. Donenberg GR, Wilson HW, Emerson E, Bryant FB. Holding the line with a watchful eye: the impact of perceived parental permissiveness and parental monitoring on risky sexual behaviour among adolescents in psychiatric care. AIDS Educ Prev. 2002;14(2):138–57.
- 39. DSM-5. Diagnostic and statistical manual of mental disorders *DSM-5* (A. P. Association Ed.): Fifth edition. Arlington: American Psychiatric Publishing. 2013.
- 40. England MJ, Sim LJ. Depression in parents, parenting, and children: Opportunities to improve identification, treatment, and prevention [Press release]. 2009.
- 41. Enten RS, Golan M. Parenting styles and eating disorder pathology. Appetite. 2009;52(3):784–7. https://doi.org/10.1016/j.appet.2009.02.013.
- 42. Esmali Kooraneh A, Amirsardari L. Predicting Early Maladaptive Schemas Using Baumrind's Parenting Styles. Iran J Psychiatry Behav Sci. 2015;9(2):e952–e952. https://doi.org/10.17795/ijpbs952.
- 43. Evans GW, Gonnella C, Marcynyszyn LA, Gentile L, Salpekar N. The role of chaos in poverty and children's socioemotional adjustment. Psychol Sci. 2005;16(7):560–5. https://doi.org/10.1111/j.0956-7976.2005.01575.x.
- 44. Furnham A, Cheng H. Perceived parental behaviour, self-esteem and happiness. Soc Psychiatry Psychiatr Epidemiol. 2000;35(10):463–70. https://doi.org/10.1007/s001270050265.
- 45. Gevers DW, van Assema P, Sleddens EF, de Vries NK, Kremers SP. Associations between general parenting, restrictive snacking rules, and adolescent's snack intake. The roles of fathers and mothers and interparental congruence. Appetite. 2015;87:184–91. https://doi.org/10.1016/j.appet.2014.12.220.
- 46. Gregorowski C, Seedat S, Jordaan GP. A clinical approach to the assessment and management of co-morbid eating disorders and substance use disorders. BMC Psychiatry. 2013;13:289. https://doi.org/10.1186/1471-244x-13-289.
- 47. Haines J, Rifas-Shiman SL, Horton NJ, Kleinman K, Bauer KW, Davison KK, Gillman MW. Family functioning and quality of parent-adolescent relationship: cross-sectional associations with adolescent weight-related behaviours and weight status. Int J Behav Nutr Phys Act. 2016;13(1):68. https://doi.org/10.1186/s12966-016-0393-7.
- 48. Hawkins JD, Catalano RF, Miller JY. Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: implications for substance abuse prevention. Psychol Bull. 1992;112(1):64–105. https://doi.org/10.1037/0033-2909.112.1.64.
- 49. Haycraft E, Blissett J. Eating disorder symptoms and parenting styles. Appetite. 2010;54(1):221–4. https://doi.org/10.1016/j.appet.2009. 11.009.



- 50. Hock RS, Hindin MJ, Bass JK, Surkan PJ, Bradshaw CP, Mendelson T. Parenting styles and emerging adult drug use in Cebu, the Philippines. Int J Cult Ment Health. 2016;9(2):108–19. https://doi.org/10.1080/17542863.2015.1091486.
- 51. Hoeve M, Dubas JS, Eichelsheim VI, van der Laan PH, Smeenk W, Gerris JRM. The relationship between parenting and delinquency: a meta-analysis. J Abnorm Child Psychol. 2009;37(6):749–75. https://doi.org/10.1007/s10802-009-9310-8.
- 52. Hoff E, Laursen B, Tardif T. Socioeconomic status and parenting Handbook of parenting: Biology and ecology of parenting, 2nd ed (pp 231–252). Mahwah: Lawrence Erlbaum Associates Publishers; 2002.
- 53. Hoffmann JP, Cerbone FG. Parental substance use disorder and the risk of adolescent drug abuse: an event history analysis. Drug Alcohol Depend. 2002;66(3):255–64.
- 54. Holmes A. G2B Reviews: stress at the intersection of anxiety, addiction and eating disorders. Genes Brain Behav. 2015;14(1):1–3. https://doi.org/10.1111/gbb.12196.
- 55. Horváth Z, Román N, Elekes Z, Griffiths MD, Demetrovics Z, Urbán R. Alcohol consumption and risk for feeding and eating disorders in adolescence: The mediating role of drinking motives. Addict Behav. 2020;107: 106431. https://doi.org/10.1016/j.addbeh.2020.106431.
- 56. Ingoldsby B, Schvaneveldt P, Supple A, Bush K. The Relationship Between Parenting Behaviours and Adolescent Achievement and Self-Efficacy in Chile and Ecuador. Marriage Fam Rev. 2003;35(3–4):139–59. https://doi.org/10.1300/J002v35n03_08.
- 57. Inoff-Germain G, Nottelmann D, Radke-Yarrow M. Evaluative communications between affectively III and well mothers and their children (Vol. 20): 1992.
- 58. Jauregui Lobera I, Bolanos Rios P, Garrido Casals O. Parenting styles and eating disorders. J Psychiatr Ment Health Nurs. 2011;18(8):728–35. https://doi.org/10.1111/j.1365-2850.2011.01723.x.
- 59. Johnson CL, Sansone RA, Chewning M. Good reasons why young women would develop anorexia nervosa: the adaptive context. Pediatr Ann. 1992;21(11):731–3.
- 60. Juli G, Juli L, Genetic of addiction: common and uncommon factors. Psychiatr Danub. 2015;27(Suppl 1):S383-390.
- 61. Kalil A, Ryan R. Parenting practices and socioeconomic gaps in childhood outcomes. Fut Child. 2020;30:29–54. https://doi.org/10.1353/foc.2020.0004.
- 62. Kelly AB, Weier M, Hall WD. The Age of Onset of Substance Use Disorders. In: de Girolamo G, McGorry PD, Sartorius N, editors. Age of Onset of Mental Disorders: Etiopathogenetic and Treatment Implications. Cham: Springer International Publishing; 2019. p. 149–67.
- 63. Kendler KS, Ohlsson H, Sundquist K, Sundquist J. Within-family environmental transmission of drug abuse: a Swedish national study. JAMA Psychiat. 2013;70(2):235–42. https://doi.org/10.1001/jamapsychiatry.2013.276.
- 64. Kiefner-Burmeister A, Hinman N. The role of general parenting style in child diet and obesity risk. Curr Nutr Rep. 2020;9(1):14–30. https://doi.org/10.1007/s13668-020-00301-9.
- 65. Kirby T, Barry AE. Alcohol as a gateway drug: a study of US 12th graders. J Sch Health. 2012;82(8):371–9. https://doi.org/10.1111/j.1746-1561.2012.00712.x.
- 66. Klesges RC, Stein RJ, Eck LH, Isbell TR, Klesges LM. Parental influence on food selection in young children and its relationships to child-hood obesity. Am J Clin Nutr. 1991;53(4):859–64. https://doi.org/10.1093/ajcn/53.4.859.
- 67. Knafo A. Gene-environment correlation in developmental psychopathology. Dev Psychopathol. 2013;25:1-6.
- 68. Kring AM, Johnson SL, Davison GC, Neale JM. Abnormal Psychology. New York: Wiley; 2012.

Discover Psychology

- Kuhn C. Emergence of sex differences in the development of substance use and abuse during adolescence. Pharmacol Ther. 2015;153:55–78. https://doi.org/10.1016/j.pharmthera.2015.06.003.
- 70. Kumar M, Huang KY. Impact of being an adolescent mother on subsequent maternal health, parenting, and child development in Kenyan low-income and high adversity informal settlement context. PLoS ONE. 2021;16(4): e0248836. https://doi.org/10.1371/journal.pone. 0248836.
- 71. Lamborn SD, Mounts NS, Steinberg L, Dornbusch SM. Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. Child Dev. 1991;62(5):1049–65.
- 72. Lewis B, Hoffman LA, Nixon SJ. Sex differences in drug use among polysubstance users. Drug Alcohol Depend. 2014;145:127–33. https://doi.org/10.1016/j.drugalcdep.2014.10.003.
- 73. Liem JH, Cavell EC, Lustig K. The influence of authoritative parenting during adolescence on depressive symptoms in young adulthood: examining the mediating roles of self-development and peer support. J Genet Psychol. 2010;171(1):73–92. https://doi.org/10.1080/00221320903300379.
- 74. Littleton HL, Ollendick T. Negative body image and disordered eating behaviour in children and adolescents: what places youth at risk and how can these problems be prevented? Clin Child Fam Psychol Rev. 2003;6(1):51–66.
- 75. Mann AP, Accurso EC, Stiles-Shields C, Capra L, Labuschagne Z, Karnik NS, Le Grange D. Factors associated with substance use in adolescents with eating disorders. J Adolesc Health. 2014;55(2):182–7. https://doi.org/10.1016/j.jadohealth.2014.01.015.
- 76. Manoochehri M, Mofidi F. Relationship between Child Rearing Styles and Anxiety in Parents of 4 to 12 Years Children. Procedia Soc Behav Sci. 2014;116:2578–82. https://doi.org/10.1016/j.sbspro.2014.01.614.
- 77. Marks RJ, De Foe A, Collett J. The pursuit of wellness: Social media, body image and eating disorders. Child Youth Serv Rev. 2020;119: 105659. https://doi.org/10.1016/j.childyouth.2020.105659.
- 78. Marsh S, Dobson R, Maddison R. The relationship between household chaos and child, parent, and family outcomes: a systematic scoping review. BMC Public Health. 2020;20(1):513. https://doi.org/10.1186/s12889-020-08587-8.
- 79. Martinez-Escudero JA, Villarejo S, Garcia OF, Garcia F. Parental Socialization and Its Impact across the Lifespan. Behav Sci. 2020;10(6):101.
- 80. Martínez-Loredo V, Fernández-Artamendi S, Weidberg S, Pericot I, López-Núñez C, Fernández-Hermida JR, Secades R. Parenting styles and alcohol use among adolescents: A longitudinal study. Eur J Invest Health Psychol Educ. 2016;6(1):27–36.
- 81. Matejevic M, Todorovic J, Jovanovic AD. patterns of family functioning and dimensions of parenting style. Procedia Soc Behav Sci. 2014;141:431–7. https://doi.org/10.1016/j.sbspro.2014.05.075.
- 82. Mattanah JF. Authoritative parenting and the encouragement of children's autonomy The family context of parenting in children's adaptation to elementary school. New York: Routledge; 2005. p. 137–56.
- 83. Mazzeo SE, Bulik CM. Environmental and genetic risk factors for eating disorders: what the clinician needs to know. Child Adolesc Psychiatr Clin N Am. 2009;18(1):67–82. https://doi.org/10.1016/j.chc.2008.07.003.



- 84. McHugh RK, Votaw VR, Sugarman DE, Greenfield SF. Sex and gender differences in substance use disorders. Clin Psychol Rev. 2018;66:12–23. https://doi.org/10.1016/j.cpr.2017.10.012.
- 85. McKinney C, Brown K, Malkin ML. Parenting style, discipline, and parental psychopathology: gender dyadic interactions in emerging adults. J Child Fam Stud. 2018;27(1):290–301. https://doi.org/10.1007/s10826-017-0865-7.
- 86. McKinney C, Morise M, Pastuszak J. Effective and ineffective parenting: associations with psychological adjustment in emerging adults (Vol. 37). 2016.
- 87. Mendez I, Ruiz-Esteban C, Lopez-Garcia JJ. Risk and protective factors associated to peer school victimization. Front Psychol. 2017;8:441. https://doi.org/10.3389/fpsyg.2017.00441.
- 88. Milevsky A, Schlechter M, Netter S, Keehn D. Maternal and paternal parenting styles in adolescents: Associations with self-esteem, depression and life-satisfaction. 2007.
- Mitchison D, Touyz S, González-Chica DA, Stocks N, Hay P. How abnormal is binge eating? 18-Year time trends in population prevalence and burden. Acta Psychiatr Scand. 2017;136(2):147–55. https://doi.org/10.1111/acps.12735.
- 90. Mochida S, Sanada M, Shao Q, Lee J, Takaoka J, Ando S, Sakakihara Y. Factors modifying children's stress during the COVID-19 pandemic in Japan. Eur Early Child Educ Res J. 2021;29(1):51–65.
- 91. Moltafet G, Sadati Firoozabadi SS, Pour-Raisi A. Parenting style, basic psychological needs, and emotional creativity: a path analysis. Creat Res J. 2018;30(2):187–94. https://doi.org/10.1080/10400419.2018.1446748.
- 92. Momeni F, Amiri S. The relationship between parents' child rearing styles and incidence of anorexia nervosa among 14–17 years old female adolescents in Isfahan. Fam Res. 2008;3:775–89.
- 93. Mruk CJ. Self-Esteem research, theory, and practice: Toward a positive psychology of self-esteem. 3rd ed. New York: Springer Publishing Co.: 2006.
- 94. Mullis F. Active parenting: an evaluation of two Adlerian parent education programs. J Indiv Psychol. 1999;55(2):225-32.
- 95. Mustelin L, Latvala A, Raevuori A, Rose RJ, Kaprio J, Keski-Rahkonen A. Risky drinking behaviours among women with eating disorders—A longitudinal community-based study. Int J Eat Disord. 2016;49(6):563–71. https://doi.org/10.1002/eat.22526.
- 96. Mwangangi R. The role of family in dealing with juvenile delinquency. Open J Soc Sci. 2019;7(3):52–63. https://doi.org/10.4236/jss.2019. 73004.
- 97. Mwania JM, Njagi SN. parenting Pstyles as predictors of drug abuse among selected public secondary school students in Embu county, Kenya. 2017.
- 98. Nam S, Chun J. Influencing factors on mothers' parenting style of young children at risk for developmental delay in South Korea: the mediating effects of parenting stress. Child Youth Serv Rev. 2014;36:81–9. https://doi.org/10.1016/j.childyouth.2013.11.008.
- 99. Neumark-Sztainer D, Wall M, Larson NI, Eisenberg ME, Loth K. Dieting and disordered eating behaviours from adolescence to young adulthood: findings from a 10-year longitudinal study. J Am Diet Assoc. 2011;111(7):1004–11. https://doi.org/10.1016/j.jada.2011.04.
- 100. Nikoogoftar M, Seghatoleslam S. The role of parenting styles in predicting adolescent behavioural and emotional problems. Practice in Clinical Psychology. 2015;3(1):23–30.
- 101. Nkansah-Amankra S, Minelli M. "Gateway hypothesis" and early drug use: Additional findings from tracking a population-based sample of adolescents to adulthood. Prev Med Rep. 2016;4:134–41. https://doi.org/10.1016/j.pmedr.2016.05.003.
- 102. Oldershaw A, Startup H, Lavender T. Anorexia nervosa and a lost emotional self: a psychological formulation of the development, maintenance, and treatment of anorexia nervosa. Front Psychol. 2019;10:219–219. https://doi.org/10.3389/fpsyg.2019.00219.
- 103. Oliveira TDO, Costa DS, Alvim-Soares A, de Paula JJ, Kestelman I, Silva AG, Miranda DM. Children's behavioural problems, screen time, and sleep problems' association with negative and positive parenting strategies during the COVID-19 outbreak in Brazil. Child Abuse Negl. 2021. https://doi.org/10.1016/j.chiabu.2021.105345.
- 104. Olvera N, Power TG. Brief report: parenting styles and obesity in Mexican American children: a longitudinal study. J Pediatr Psychol. 2010;35(3):243–9. https://doi.org/10.1093/jpepsy/jsp071.
- 105. Parent J, Forehand R, Jane MMC, Edwards M, Conners EN, Long N, Jones JD. The Relation of Harsh and Permissive Discipline with Child Disruptive Behaviours: Does Child Gender Make a Difference in an At-Risk Sample? (Vol. 26); 2011.
- 106. Poggi A, Kalb G. From Parent to Child? The Long-Lasting Effects of Social Support. Melbourne Institute of Applied Economic and Social Research, (Melbourne Institute Working Paper Series wp2020n20). 2020.
- 107. Popkin MH. Active Parenting Now: Program Kit; 2002. p. 379.
- 108. Power TG. Parenting dimensions and styles: a brief history and recommendations for future research. Child Obes. 2013;9(1):S14–21. https://doi.org/10.1089/chi.2013.0034.
- 109. Querido JG, Warner TD, Eyberg SM. Parenting styles and child behaviour in African American families of preschool children. J Clin Child Adolesc Psychol. 2002;31(2):272–7. https://doi.org/10.1207/s15374424jccp3102_12.
- 110. Rampou AM, Havenga Y, Madumo M. Parenting experiences of mothers living with a chronic mental illness. Health SA Gesondheid. 2015;20(1):118–27. https://doi.org/10.1016/j.hsag.2015.04.004.
- 111. Rohner RP. Introduction: parental acceptance-rejection theory studies of intimate adult relationships. Cross-Cult Res. 2008;42(1):5–12. https://doi.org/10.1177/1069397107309749.
- 112. Root TL, Pinheiro AP, Thornton L, Strober M, Fernandez-Aranda F, Brandt H, Bulik CM. Substance use disorders in women with anorexia nervosa. Int J Eat Disord. 2010;43(1):14–21. https://doi.org/10.1002/eat.20670.
- 113. Roubinov DS, Boyce WT. Parenting and SES: relative values or enduring principles? Curr Opin Psychol. 2017;15:162–7. https://doi.org/10.1016/j.copsyc.2017.03.001.
- 114. Russell ST, Crockett LJ, Chao RK. Introduction: Asian American Parenting and Parent-Adolescent Relationships. In: Russell ST, Crockett LJ, Chao RK, editors. Asian American Parenting and Parent-Adolescent Relationships. New York: Springer, New York; 2010. p. 1–15.
- 115. Rutledge JM, Harrist AW, Hubbs-Tait L, Larzelere RE, Topham GL, Shriver LH, Swindle T. A longitudinal study of parenting style and child weight with moderation by american indian ethnicity. Parent Sci Pract. 2019;19(4):267–92. https://doi.org/10.1080/15295192. 2019.1642083.
- 116. Rutledge JM, Swindle TM. Permissive Parents Encyclopedia of Family Studies (pp. 1–2). 2016.



- 117. Savage JS, Fisher JO, Birch LL. Parental influence on eating behaviour: conception to adolescence. J Law Med Ethics. 2007;35(1):22–34. https://doi.org/10.1111/j.1748-720X.2007.00111.x.
- 118. Sawai R, Mohd Y. The relationship between parenting style and the risk of drug abuse among youth. 2019.
- 119. Schneider W, Schenck-Fontaine A. Growing up unequal: Objective and subjective economic disparities and authoritarian parenting. Child Abuse Negl. 2021. https://doi.org/10.1016/j.chiabu.2021.105332.
- 120. Sell M, Daubmann A, Zapf H, Adema B, Busmann M, Stiawa M, Wiegand-Grefe S. Family functioning in families affected by parental mental illness: parent, child, and clinician ratings. Int J Environ Res Public Health. 2021;18(15):7985. https://doi.org/10.3390/ijerp h18157985.
- 121. Shek DTL, Zhu X, Dou D, Chai W. Influence of family factors on substance use in early adolescents: a longitudinal study in Hong Kong. J Psychoactive Drugs. 2020;52(1):66-76. https://doi.org/10.1080/02791072.2019.1707333.
- 122. Skinner E, Johnson S, Snyder T. Six Dimensions of Parenting: A Motivational Model. Parenting. 2005;5(2):175–235. https://doi.org/ 10.1207/s15327922par0502 3.
- 123. Sleddens SFC, Gerards SMPL, Thijs C, de Vries NK, Kremers SPJ. General parenting, childhood overweight and obesity-inducing behaviours: a review. Int J Pediatric Obesity. 2011;6(sup3):e12-27. https://doi.org/10.3109/17477166.2011.566339.
- 124. Smith MA, Lacy RT, Strickland JC. The effects of social learning on the acquisition of cocaine self-administration. Drug Alcohol Depend. 2014;141:1-8. https://doi.org/10.1016/j.drugalcdep.2014.04.025.
- 125. Srivastay D, Lal Mathur MN. Helicopter parenting and adolescent development: from the perspective of mental health. 2020.
- 126. Striegel-Moore RH, Rosselli F, Perrin N, DeBar L, Wilson GT, May A, Kraemer HC. Gender difference in the prevalence of eating disorder symptoms. Int J Eat Disord. 2009;42(5):471-4. https://doi.org/10.1002/eat.20625.
- 127. Taylor A, Wilson C, Slater A, Mohr P. Parent- and child-reported parenting. Assoc Child Weight-Related Outcomes Appetite. 2011;57(3):700-6. https://doi.org/10.1016/j.appet.2011.08.014.
- 128. Thorpe HHA, Hamidullah S, Jenkins BW, Khokhar JY. Adolescent neurodevelopment and substance use: Receptor expression and behavioural consequences. Pharmacol Ther. 2020;206:107431. https://doi.org/10.1016/j.pharmthera.2019.107431.
- 129. Topham GL, Page MC, Hubbs-Tait L, Rutledge JM, Kennedy TS, Shriver L, Harrist AW. Maternal depression and socio-economic status moderate the parenting style/child obesity association. Public Health Nutr. 2009;13(8):1237-44. https://doi.org/10.1017/S136898000
- 130. Toran M, Sak R, Xu Y, Şahin-Sak İT, Yu Y. Parents and children during the COVID-19 quarantine process: Experiences from Turkey and China. J Early Childhood Res. 2021;19(1):21–39. https://doi.org/10.1177/1476718X20977583.
- 131. Tremblay Pouliot M-A, Poulin F. Congruence and incongruence in father, mother, and adolescent reports of parental monitoring: examining the links with antisocial behaviours. J Early Adolescence. 2020;41(2):225-52. https://doi.org/10.1177/0272431620912484.
- 132. Tylka TL, Hill MS. Objectification theory as it relates to disordered eating among college women. Sex Roles. 2004;51(11):719–30. https://doi.org/10.1007/s11199-004-0721-2.
- 133. Verweij KJ, Creemers HE, Korhonen T, Latvala A, Dick DM, Rose RJ, Kaprio J. Role of overlapping genetic and environmental factors in the relationship between early adolescent conduct problems and substance use in young adulthood. Addiction. 2016;111(6):1036– 45. https://doi.org/10.1111/add.13303.
- 134. Wake M, Nicholson JM, Hardy P, Smith K. Preschooler obesity and parenting styles of mothers and fathers: australian national population study. Pediatrics. 2007;120(6):e1520-7. https://doi.org/10.1542/peds.2006-3707.
- 135. Wang P, Sun X, Li W, Wang Z, He S, Zhai F, Chen J. Mental Health of Parents and Preschool-Aged Children During the COVID-19 Pandemic: The Mediating Role of Harsh Parenting and Child Sleep Disturbances. Front Psych. 2021;12:746330-746330. https://doi.org/ 10.3389/fpsvt.2021.746330.
- 136. Webster-Stratton C, Taylor T. Nipping early risk factors in the bud: preventing substance abuse, delinquency, and violence in adolescence through interventions targeted at young children (0-8 years). Prev Sci. 2001;2(3):165-92.
- 137. Wlodarczyk O, Schwarze M, Rumpf H-J, Metzner F, Pawils S. Protective mental health factors in children of parents with alcohol and drug use disorders: A systematic review. PLoS ONE. 2017;12(6):e0179140-e0179140. https://doi.org/10.1371/journal.pone.0179140.
- 138. Yunus KRM, Dahlan NA. Child-rearing practices and socio-economic status: possible implications for children's educational outcomes. Procedia Soc Behav Sci. 2013;90:251-9. https://doi.org/10.1016/j.sbspro.2013.07.089.
- 139. Zubatsky M, Berge J, Neumark-Sztainer D. Longitudinal associations between parenting style and adolescent disordered eating behaviours. Eat Weight Disord. 2015;20(2):187-94. https://doi.org/10.1007/s40519-014-0154-z.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

