The Impact of Family Dynamics on Eating Disorders

Ummehani Pithewan

Leigh High School, Grade 11

United States of America

ummehani.pithewan@gmail.com

Adviser: Kaitlyn Schuler, Polygence Research Academy

9 September 2022

Abstract

Eating disorders are a significant public health concern. Galmiche and colleagues conducted a systematic review with 94 studies from the years 2000 to 2018 on the global prevalence of eating disorders (page number). Based on their systematic review, the weighted mean of lifetime prevalence of eating disorders was 8.4% (range 3.3-18.6%) for women and 2.2% (range 0.8-6.5%) for men. Further, 75% of first-onset cases emerge during adolescence. An empirically supported risk factor for eating disorders is parent-child interactions and family environment (Jacobi, Hütter, Fittig). This is a narrative review on how parental behaviors impact the development of adolescent or young adult eating disorders. A literature search was conducted using the Google Scholar and Research Rabbit databases. Eating disorders are impacted by family dynamics such as attachment and parenting styles, and modeling of food and weight-related behaviors.

The Impact of Family Dynamics on Eating Disorders

Family dynamics during adolescence play a significant role in the development of eating disorders. Eating Disorders are psychological disorders characterized by abnormal eating habits. Annual U.S. prevalence rates for eating disorders, including anorexia nervosa, bulimia nervosa, and binge eating disorder, range from 0.04% to 3.5% with BED being the most common (i.e. 3.5% for women and 2.0% for men; Agras Robinson 34-41). Some risk factors for eating disorders develop during childhood and adolescence (Agras Robinson 106-122). For example, maternal health issues, parental criticism, and neglect can contribute to an adolescent's risk of developing an eating disorder. This narrative review will focus on the impact of family dynamics on eating disorders across three domains: attachment styles, parenting styles, and modeling of food and weight-related behaviors.

Definition of Terms

Eating Disorders. Eating disorders are psychological disorders characterized by abnormal eating habits. The three most common eating disorders are Anorexia Nervosa (AN), Bulimia Nervosa (BN), and Binge Eating Disorder (BED).

According to the Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5), Anorexia Nervosa (AN) is, defined as a restriction of energy intake relative to requirements leading to significantly low body weight and is a core feature of anorexia nervosa (American Psychiatric Association 338-345). People with anorexia nervosa also display a fear of gaining weight or of becoming fat, persistent behavior that interferes with weight gain, and disturbance of body weight and shape perception. Prevalence rates of anorexia nervosa are 0.4% (1 in 200) prevalence in a 1-year time frame for women and 0.04% (1 in 2,000) in the same time frame for men. AN's standard mortality rate (SMR) due to suicide is 56.9 and SMR due to all causes is 5.86 (Agras Robinson 34-41). AN has many risk factors, but a few include inferiority in childhood, anxiety, OCD, and maternal health issues (e.g. mental health problems, addictions, etc.). People living with AN experience an intense, irrational fear of gaining weight, food restriction, purging, misuse of weight loss pills, and compulsive exercise (Agras Robinson 106).

Bulimia Nervosa (BN) is, according to the DSM-5, recurrent episodes of binge eating (American Psychiatric Association 345-350). An episode of binge eating is characterized by both of the following: (1) eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is larger than what most individuals would eat in a similar period of time

under similar circumstances; (2) sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating). According to Agras and Robinson (34-41), the prevalence of BN is 1% to 1.5% in adolescents and women in 1 year (1.5% - in American women, 2.9% - in Australian women, 4.6% in Italian women). Lifetime prevalence is 1.5% for women (1.3% in girls) and 0.5% for men (0.5% for boys). The standard mortality ratio (SMR) for BN is 1.93 for all causes and 7.9 for suicide. The prevalence of suicide attempts in BN patients is 12%. Risk factors for BN include early childhood health problems, physical neglect in childhood, sexual abuse, negative perception of parental attitudes, perceived low social support from family, adverse family experiences, and parental problems. People living with BN will eat a large amount of food over a short period of time and will then compensate by using unhealthy methods to avoid weight gain (Agras Robinson 106).

Binge Eating Disorder (BED) is according to the DSM-5 (American Psychiatric Association 350-353), associated with three (or more) of the following: (1) Eating much more rapidly than normal; (2) eating until feeling uncomfortably full; (3) eating large amounts of food when not feeling physically hungry; (4) eating alone because of feeling embarrassed by how much one is eating; (5) feeling disgusted with oneself, depressed, or very guilty after eating. According to Agras and Robinson (34-41), the prevalence of BED in women is 3.5% and 2.0% in men in the United States. Lifetime prevalence for adolescent girls is 2.3% and 0.8% in adolescent boys. Binge Eating Disorder has a crude mortality ratio of 3% and SMR of 2.29 with no recorded suicide attempts for BED. Risk factors for BED include low perceived social support, childhood experiences of sexual abuse and physical neglect, greater exposure to parental criticism, minimal affection, high expectations, low maternal care, high overprotection, parental neglect, and rejection (106). People living with BED will eat large amounts of food in a short period of time, and experience difficulty controlling the amount that they eat (106).

Parenting Styles. Parenting styles are patterns to upbringing children which are formed from normal interaction of parents and their response to children's behaviors. There are four well-known styles: authoritarian, authoritative, permissive, and uninvolved.

Sanvictores and Mendez explain in their review of parenting styles that an authoritarian parent or guardian is not nurturing, very strict, unyielding, and has many rules that are not explained to their child, though the child is expected to follow those rules with absolute precision, out of fear of punishment. Parents or guardians with this parenting style demand

obedience and conformity and do not allow much independence or autonomy in their children. Authoritarian parents are low in responsiveness and support, and they prefer more punishing and forceful measures rather than explaining their reasoning. The authoritarian parent is strict, uncompromising, and prefers punishment as a favored way of disciplining their child.

In contrast, the authoritative parent is nurturing, has clear guidelines for behavior that are explained, and disciplinary actions are intended to teach rather than punish (Sanvictores, Mendez). Parents are open to change and willing to work with their children, rather than use force to make the child do what the parent wants. Authoritative parents are affectionate and attentive to the child's needs while keeping firm and clear expectations for socially acceptable behavior. Authoritative parents are neutral, reasonable, and consistent. They include their child in their decision-making process.

Permissive parents are nurturing, but no rules are enforced and their parenting style is very lax (Sanvictores Mendez). The permissive parent lets their child figure things out on their own, and they are more like friends than authority figures. While permissive parents are very responsive and willing to support their children, they give their children a high level of freedom and do not punish their children or enforce many, if any rules at all (Sanvictores, Mendez). While permissive parents do not punish their children, they are inconsistent and unpredictable.

Uninvolved parents are not nurturing and are very detached from their child's life (Sanvictores, Mendez). Uninvolved parents meet the most basic expectations, like food, shelter, and schooling, but otherwise, remain distant from their child. There are no disciplinary actions ever enacted and there is little to zero communication with their child. Parents are low in responsiveness and spend little to no time interacting with or talking to their children. Uninvolved parents do not have many demands and most often tend to fail in providing behavioral standards for their children.

Parent-Child Attachment Styles. There are four types of parent-child attachment styles, secure, anxious, avoidant, and disorganized.

In adulthood, individuals who have secure attachment styles are able to form healthy relationships that allow them to connect with others while remaining independent (Urban 4). Children with secure attachment have greater perceived acceptance from parents. There is greater maternal acceptance and positive affect. In a secure attachment, there is low psychological control. Mothers are more available and responsive to their children's needs, and

they express less negative emotion when discussing their children. In a secure attachment, mothers are more sensitive and supportive of their children's needs.

As children with anxious attachment grow up, they are often afraid to get to know people and cling to parents or romantic partners (Urban 5). Parents in this attachment style behave inconsistently toward children sometimes because of poor or lacking parenting skills. Children with anxious attachment are more likely to be victims of neglect from parents. Children will be more likely to have depressive symptoms, anxiety, and substance use problems (Cassidy, Shaver 182). Anxious attachment style parents are unable to invest in their children, which is shown by inconsistent or unpredictable parenting (Cassidy, Shaver 104).

In an avoidant attachment style, these individuals are more likely to avoid loving relationships with others and withdraw from close connections with others. They also tend to dislike groups that are high in warmth. Children with avoidant attachment to their mothers perceived their parents to exhibit lower levels of involvement, support, and interest in their activities (Urban 4). Parents are not a secure base for their children, and the parents will be cold and rejecting. Parents with an avoidant attachment style are unwilling to invest in their children, as shown by inconsistent or unpredictable parenting (Cassidy, Shaver 104). In the strange situation experiment, Ainsworth and colleagues (1978) found that infants with an avoidant attachment style resisted their mothers by distancing themselves or ignoring them when they returned to the room. Mothers with this parenting style show the most problematic parenting and this attachment style is mostly seen in children who are maltreated or otherwise scared of parental behavior, like parents dealing with unresolved trauma. Behaviors for children in a disorganized attachment style include scared facial expressions, freezing or stilling of behavior, or avoidance in distress (Cassidy, Shaver 156).

Parental Modeling of Food and Appearance-Related Behaviors. Parent role-modeling is often conceptualized as a parent's purposeful or intentional effort to demonstrate healthy food choices and eating behaviors to encourage similar behaviors in the child (Vaughan et al). Parental modeling of food behaviors could be defined as restricting what a child eats, or demonstrating positive or negative food behaviors. An example of parental modeling of appearance-related behaviors would be remarks made by a parent in front of a child about the parent's or child's appearance.

Literature Review

There is a large body of literature on the impact of family dynamics on eating disorders in adolescence. In general, literature supports that family dynamics are key risk factors for adolescent eating disorders. Three important areas of the research literature are parenting styles, attachment, and parental modeling of food and weight-related behaviors.

Parenting Styles. Parenting styles are known to impact children's eating and weight-related behaviors. This can be seen in how much control they have over their child's eating habits and behaviors. Different parenting styles can mean different interactions with children. Whether or not a child develops an eating disorder is something that can be impacted by family influences, especially maternal and paternal influences. According to Scaglioni et al, authoritative parents are associated with healthy eating habits in their offspring and a lower risk of obesity (4). Parents with an authoritative parenting style also lead to high rates of self-discipline, emotional maturity, and overall healthier eating habits (Scaglioni et al 4). Authoritative parenting and feeding styles are best for preventing weight-related problems (Krause and Dailey, 264). On the other hand, restrictive practices around food, usually displayed by authoritarian parents, can increase the overconsumption of unhealthy and restricted foods and the underconsumption of core foods in children (Scaglioni et al 4). Authoritarian parenting can cause a sense of lack of control over their children. Children raised by parents who employ authoritarian parenting styles are likely to do their best to accommodate others, especially their parents, even when it causes harm to them. Since these types of parents are very rigid and controlling, there is an obvious lack of control over their offspring. Because the child will go out of their way to accommodate their parents, especially their mother, they will also wish to fit their parents' ideal of perfection, which can include developing an eating disorder in the effort to earn other people's, more specifically their parents', affection and praise. Authoritarian parenting and feeding can also cause a lower intake of fruit, juices, and vegetables (Krause and Dailey, 248). Permissive parenting styles have been associated with less weight loss and greater food intake (Krause and Dailey, 250). According to *Types of Parenting Styles and Effects on Children*, permissive parenting can lead to unhealthy eating habits and an increased risk of obesity (Sanvictores and Mendez). This, in turn, can lead to the development of one or more eating disorders. Parenting styles that can lead to a lack of a sense of control in children also include uninvolved parenting, which can, in some cases, influence the development of eating disorders in adolescence and

adulthood. However, there is limited research on the impact of uninvolved parenting styles on eating disorders.

Parent-Child Attachment Styles. The type of attachment that a child has to their parents can make a huge impact on parental influences on eating disorders. Secure attachment is seen to have the most positive impact on the chances of a child developing an eating disorder. A secure parent and child attachment means that most often, a child, especially daughters, feels more in control of their lives, therefore losing the incentive to develop an eating disorder as a way to feel in control of their environment. However, the other three attachment styles tend to create a lack of sense of control and are called insecure attachment styles. Children with anxious attachment styles are more likely to show more symptoms of BN and AN than those with secure attachment styles, and there are poorer treatment outcomes (Gander et al). Individuals with an avoidant attachment are more likely to have depressive and anxious symptoms and show signs of a substance abuse problem (Cassidy and Shaver, 182). Depression, anxiety, and substance abuse are all mental health problems that share risk factors with eating disorders. Adolescents with anxious attachment styles feel a desperate need for approval, which leads to an impaired ability to develop healthy coping mechanisms. Though both anxious and avoidant attachments can lead to an increase in depressive and anxiety symptoms over time (Cassidy and Shaver 409). However, adolescents with avoidant attachment styles showed a larger reduction in depressive symptoms than adolescents with anxious attachment styles (Gander et al). Those with avoidant attachments tend to have a negative outlook on others. They are very self-reliant and avoid close relationships since they have found early on that relationships do not meet their emotional needs. They also tend to exercise hyper control over their emotions (Krause and Dailey, 148-149). Avoidant attachment styles can lead to needing control over other aspects of life, such as control over the body, or food consumption, leading to an eating disorder. This means that they would not have a strong support system, so they would be more likely to develop an eating disorder as a coping mechanism.

Parental Modeling of Food and Appearance-Related Behaviors. Parent behaviors can influence whether or not adolescents develop an eating disorder. According to a study by Scaglioni et al., what motivates maternal modeling of food and weight behaviors is not well understood (5). Scaglioni and colleagues claim that mothers have limited awareness of their modeling behaviors. Mothers can unintentionally influence the development of eating disorders in their

children. According to *The Influence of Mothers on the Development of Their Daughter's Eating Disorders: An Integrative Review*, maternal dieting is associated with unhealthy eating behaviors in their children (Ferreria et al). This review shows that a mother's eating habits and the ones she instills in her children could influence the development of eating disorders. While there is information about how mothers model food and appearance-related behaviors, there is limited research on why they do it (Scaglioni et al 5). Children imitate the eating behaviors of their parents, even if the modeling is not intentional. There is evidence, according to Langdon-Dally and Sperell, that by eating regular meals together as a family, parents reduce the risk of their child developing eating disorders (12). There are two ways parents can influence a child's eating habits, by using overt control and covert control. Overt control is obvious, by restricting and controlling what their children eat and do not eat, while covert control is less obvious. Covert control is when parents model food behaviors for their children to follow, rather than simply restrict them. With covert control, parents model their food behaviors and set standards for their kids using their behaviors, doing things such as avoiding foods in grocery stores and restaurants that are unhealthy. Depending on a child's gender, the way a mother models food behaviors for them will be different, even if it is not entirely conscious (Scaglioni et al 5). When a child is younger, more overt control methods are applied, however, as a child reaches adolescence, parents start to trust their children more, so they use more covert tactics. It is shown that the more attention a mother pays to her body, the more the child, specifically daughters, pays attention to theirs (Ferreria et al). A mother's modeling of appearance-related behaviors is shown to have a big influence on the way her children see their bodies. If the behaviors are negative, such as extreme dieting, or complaints about her body, the child will notice the same things in their bodies and will therefore start to exhibit the same behaviors as their mother.

Limitations in Literature. There is a large body of literature on how parent-child interactions influence adolescent eating disorders. However, many first theories were based on clinical observations rather than empirical evidence. Only in the last few decades, researchers have been investigating relationships in families with eating disorders more systematically (Errui et al). Some authors have focused more on family interaction in families that have children with eating disorders.

In contrast, other authors have focused more on trying to identify specific family interactional patterns related to eating disorders. There are also studies examining the difference between

families with eating disorders and families not part of the clinical research. The results of these studies show that by only considering the family functioning, which is defined by *A systematic review of the literature on family functioning across all eating disorder diagnoses in comparison to control families* as “the interactions of family members that involve physical, emotional and psychological activities”(Holtom-Viesel, Allan), in clinical groups was less than the functioning in the control groups (Erriu et al). However, when different variables in family functioning are considered, like emotional involvement, communication, and organization, the results of the trials vary and are sometimes contradictory. As such, dysfunctional family dynamics do not have specific empirical evidence backing them up. There are many different results concerning family functioning in different categories of eating disorders. Some studies showed no significant differences between the different categories of eating disorders. Other studies showed significant differences between categories of eating disorders. Recent studies, partly confirming observations of family therapists, show that in families with anorexic daughters, there is conflicting communication and a lack of reciprocity and emotional harmony. The above patterns are consistent with the empirical evidence of poor child interactions in childhood. Many studies have shown an association between eating disorders and family context, though it is hard to draw concrete conclusions about the role of family dynamics in the pathology of eating disorders. Current scientific literature rejects the idea that family is the only cause, or the main risk factor, of eating disorders. The Academy of Eating Disorders says that any generalized model for eating disorders that has family as the main risk factor must be rejected.

Conclusion

There are a few main points of focus when looking at how family dynamics impact the development of eating disorders. A few of those are parenting styles, attachment styles, and food or weight-related behaviors. Parenting styles have a big impact on the development of eating disorders in childhood and adolescence. Authoritarian parenting styles are most associated with eating disorders and authoritative parenting styles are more protective. Secure attachment styles are more protective, whereas avoidant, anxious, and anxious-avoidant are more predictive of mental health difficulties, such as eating disorders. Parents use overt or covert control to model eating and weight-related behaviors, which can play a role in the development of eating disorders. Modeling of food and weight-related behaviors can be especially influential within the mother-daughter relationship. While a large body of literature on

this topic indicates that family variables play a role, numerous other factors, such as adolescent personality, peer group influence, and culture also play an important role. Family dynamics are one of many factors that are important to target in eating disorder prevention and treatment.

References

1. Ainsworth, M. D. S., Blehar, M., Waters, E., & Wall, S. *Patterns of attachment: A psychological study of the Strange Situation*. Hillsdale: Erlbaum, 1978.
2. Agras, W. Stewart, and Athena Robinson. *The Oxford Handbook of Eating Disorders*. Oxford University Press, 2018.
3. American Psychiatric Association. "Feeding and Eating Disorders." *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*, CBS Publishers & Distributors, Pvt. Ltd., New Delhi, Delhi, 2017, pp. 329–354.
4. Cassidy, Jude, and Phillip R. Shaver. *Handbook of Attachment Theory, Research, and Clinical Applications*. Third ed., The Guilford Press, 2016.
5. Erriu, Michela, et al. *The Role of Family Relationships in Eating Disorders in Adolescents: A Narrative Review*. *MDPI*, Multidisciplinary Digital Publishing Institute, 2 Apr. 2020, https://www.mdpi.com/2076-328X/10/4/71/htm.
6. Ferreira, Isabella Marta S., et al. *The Influence of Mothers on the Development of Their Daughter's Eating Disorders: An Integrative Review*. Arch Clin Psychiatry, 22 Feb. 2021, https://www.scielo.br/j/rpc/a/LBt4z7yTvGJsTfHpKJFx9RR/?format=pdf.
7. Gander, Manuela, et al. "Eating Disorders in Adolescence: Attachment Issues from a Developmental Perspective." *Frontiers in Psychology*, Frontiers Media S.A., 10 Aug. 2015, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4530258/.
8. Krause, Pacey H., and Tahlia M. Dailey. *Handbook of Parenting: Styles, Stresses and Strategies*. Nova Science Publishers, 2009.
9. Langdon-Daly, Jasmine, and Lucy Serpell. "Protective Factors against Disordered Eating in Family Systems: A Systematic Review of Research." *Journal of Eating Disorders*, U.S. National Library of Medicine, 2017, https://jeatdisord.biomedcentral.com/track/pdf/10.1186/s40337-017-0141-7.pdf.
10. Sanvictores, Terrence, and Magda D. Mendez. "Types of Parenting Styles and Effects on Children - Statpearls - NCBI ..." *National Library of Medicine*, StatPearls Publishing, 9 Mar. 2022, https://www.ncbi.nlm.nih.gov/books/NBK568743/.

11. Scaglioni, Silvia, et al. “Factors Influencing Children's Eating Behaviours.” *MDPI*, Multidisciplinary Digital Publishing Institute, 31 May 2018, https://www.mdpi.com/2072-6643/10/6/706.
12. Urban, Julianne R. “Attachment Theory and Its Relationship with Anxiety.” *Liberty University Digital Commons*, Liberty University, Feb. 2022, https://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=1119&context=kabod.
13. van der Horst, Klazine, and Ester F.C. Sleddens. “Parenting Styles, Feeding Styles and Food-Related Parenting Practices in Relation to Toddlers' Eating Styles: A Cluster-Analytic Approach.” Edited by \ Abelardo Aguilera, *PloS One*, U.S. National Library of Medicine, 24 May 2017, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5443548/.
14. Vaughn, Amber E, et al. “What Matters Most - What Parents Model or What Parents Eat?” *Appetite*, U.S. National Library of Medicine, 1 July 2018, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5971159/.