

PARENTING FEEDING STYLES, FEEDING CONTROL PRACTICES IN RELATION TO PSYCHOPATHOLOGY AMONG MIDDLE AGED CHILDREN

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ABSTRACT

This study investigates the relationship between parental feeding styles, feeding control, and psychopathology in middle-aged children with diagnosed psychopathologies. Using a correlational research design, data were collected from 80 parents of children aged 6-12 years from special education institutes in Lahore, employing purposive sampling. Three primary assessment tools were utilized: the Parenting Feeding Style Questionnaire (PFQ), the Child Feeding Questionnaire (CFQ), and the Child Behavior Checklist (CBCL) each demonstrating high reliability. The analysis revealed significant correlations between parental feeding styles and both feeding control and psychopathology. Instrumental feeding was positively related to feeding control and psychopathology. Hierarchical regression analysis indicated that demographic variables explained (11.5%) of the variance in psychopathology, with parental feeding styles adding an additional (20.5%). Instrumental and encouragement feeding styles were significant predictors, though feeding control did not significantly improve the model. Mediation analysis revealed that feeding control partially mediates the relationship between instrumental and encouragement feeding styles and psychopathology, suggesting that feeding control significantly contributes to the observed psychopathological outcomes. The findings highlight the complex interplay between parental feeding practices and child psychopathology, emphasizing the need for targeted interventions that address feeding styles and control mechanisms to potentially mitigate psychopathological symptoms in children.

Chapter I

Introduction

Parental feeding styles and feeding control play pivotal roles in shaping individuals' relationships with food from early childhood through middle age. These factors encompass the strategies, attitudes, and behaviors parents employ when it comes to their children's nutrition, mealtime routines, and food-related decisions. The impact of parenting feeding styles and feeding control extends beyond immediate dietary choices, influencing long-term psychological well-being, including the development of psychopathological

conditions such as eating disorders, obesity, and other mental health issues in middle age. Understanding the complex relationship between parenting practices and psychopathology is essential for promoting healthy eating behaviors and mental health outcomes across the lifespan (Shloim et al., 2015). The concept of parenting feeding styles encompasses a spectrum of approaches, ranging from authoritative, marked by warmth, responsiveness, and suitable control, to authoritarian, marked by high levels of control and strict dietary rules, permissive, which entails

minimal control and few restrictions, and neglectful, where little attention is paid to feeding practices. Each style can significantly impact a child's eating behaviors, attitudes towards food, and emotional relationship with eating, laying the foundation for future dietary patterns and psychological well-being in middle age. Similarly, feeding control refers to the degree of influence parents exert over children's food intake, including practices like restriction, pressure to eat, and encouragement of autonomy in food choices. The dynamic interaction between parenting feeding styles and feeding control shapes not only nutritional outcomes but also the risk of developing psychopathological disorders later in life (Rollins et al., 2019).

1.1 Parental Feeding Styles

Parenting feeding styles and feeding control are pivotal aspects of child-rearing that significantly impact children's dietary habits, eating behaviors, and overall wellbeing. The manner in which parents approach feeding their children play an important role in shaping their attitudes toward food, body image, risk of developing psychopathological conditions later in life. Extensive research has explored the link between parenting feeding styles, feeding control, and various psychopathological outcomes, shedding light on the complex interaction between parental influences and mental health in children and adolescents (Darling & Steinberg, 1993). Parenting feeding styles encompass a spectrum of approaches that parents adopt in managing their children's dietary intake and mealtime behaviors. The authoritative feeding style is all about balance of warmth, responsiveness, and suitable levels of control, where parents establish clear expectations and boundaries while also being supportive and alert to the needs and preferences of children (Darling & Steinberg, 1993).

This approach is often linked with positive results, such as healthier eating habits, lower risk of disordered eating, and better psychological well-being (Hughes et al., 2005). In contrast, the authoritarian feeding style is identified by a chief level of control, strict rules, and limited autonomy for children in food choices (Birch & Fisher, 2000). Authoritarian feeding may include rigid mealtime routines, forced consumption of certain foods, and punitive measures for not adhering to dietary guidelines. According to research³ this approach

is associated with negative outcomes, such as increased risk of eating disorders, food aversions, and emotional distress related to eating (Patrick & Nicklas, 2005). Permissive feeding styles, characterized by minimal control, few restrictions, and indulgence in food preferences of children, have also been studied in relation to psychopathology (Shloim et al., 2015). Parents with permissive feeding styles often prioritize their children's desires over nutritional guidelines, allowing unrestricted access to highly palatable but less nutritious foods and snacks. This approach can lead to issues such as overeating, poor dietary quality, and increased risk of obesity and related health problems (Rollins et al., 2019). Additionally, neglectful feeding styles, where parents show little interest or involvement in their children's eating habits, can contribute to irregular meal patterns, inadequate nutrition, and heightened vulnerability to psychopathological conditions (Hughes et al., 2005). Previous research has provided substantial evidence linking parenting feeding styles to various psychopathological outcomes in children and adolescents. For instance, a longitudinal research by (Hughes et al., 2005) followed a cohort of children from early childhood to adolescence and found that authoritative feeding methods were linked with lower rates of eating disorders, body dissatisfaction, and anxiety related to food and weight. The study highlighted the protective effects of supportive yet structured feeding practices in promoting positive mental health outcomes. Similarly, Birch and Fisher (2000) conducted a meta-analysis of existing literature and concluded that authoritarian feeding styles were significantly correlated with disordered eating behaviors, unhealthy weight control practices, and negative body image perceptions in adolescents. These findings underscore the detrimental impact of overly controlling and restrictive feeding practices on psychopathological outcomes. In addition to feeding styles, feeding control strategies employed by parents have also been implicated in psychopathological risk (Rollins et al., 2019). Feeding control encompasses exercises like as restriction, force to eat, monitoring intake of food, and encouraging autonomy in food choices. Research by Patrick and Nicklas (2005) explored the impact of parents feeding control on children's emotional eating behaviors and it is proven that chief degree of parental control to eat were linked with increased emotional eating tendencies and

heightened risk of emotional overeating in response to stress or negative emotions. This suggests that parental feeding behaviors can influence not only dietary habits but also emotional regulation and coping strategies, which are linked to psychopathological conditions such as binge eating disorder, emotional eating, and mood disturbances. Furthermore, Shloim et al., (2015) described the role of parental modeling in shaping eating behaviors of children and psychopathological risk. They found that children who observed their parents exhibiting healthy eating behaviors and positive attitudes toward food were very minor chances to develop disordered eating patterns and psychological distress related to food and body image. This highlights the importance of parental modeling and the transmission of healthy eating habits and attitudes within the family environment. Appreciating the impact of parenting feeding methods and feeding control on psychopathology is crucial for developing effective interventions and prevention strategies. By promoting positive and nurturing feeding environments marked by warmth, responsiveness, and reasonable degree of control, parents can contribute to children's healthy development and reduce the risk of psychopathological outcomes. Although, it is necessary to identify that individual differences, cultural elements, and environmental impacts also play positive roles in shaping eating behaviors of children and mental health. Future studies must be continue to examine the mechanisms underlying these relationships, identify modifiable elements that contribute to psychopathological risk, and develop targeted interventions to support optimal psychological well-being in children and adolescents.

1.2 Parents Healthy Feeding Styles

Healthy feeding methods serve to the approaches and behaviors parents do to nourish and feed their children in a positive and supportive manner. Research indicates that these feeding styles can have significant impacts on children's physical health, emotional well-being, and long-term eating habits. There are generally four main types of healthy feeding styles that researchers have identified: authoritative, authoritarian, permissive, and uninvolved. Among these, authoritative feeding approach has been consistently linked with the most positive results for children (Black & Aboud., 2011).

1.2.1 Authoritative Feeding Style

This style is characterized by a balanced approach that combines warmth, responsiveness, and structure. Parents using an authoritative feeding style set clear expectations and guidelines around mealtime behaviors and food choices. They encourage adopting healthy eating habits, giving nutritious food options, and promoting autonomy by allowing children to make choices within the established boundaries. This style fosters a positive relationship with food, teaches self-regulation, and supports long term health eating patterns (Black & Aboud., 2011).

1.2.2 Responsive Feeding Style

In this style, parents are attuned to their child's hunger and fullness cues, preferences, and nutritional needs. They respond promptly and appropriately to these cues, offering food when the child is hungry and respecting their signals of satiety. Responsive feeding encourages self-regulation of food intake, helps prevent overeating or under eating, and supports a healthy relationship with food based on internal cues rather than external influences (Black & Aboud., 2011) published in Pediatrics showed that responsive feeding practices were associated with improved child growth outcomes, including lower rates of under nutrition and stunting, particularly in low-resource settings. Children whose parents used responsive feeding styles were less likely to exhibit picky eating behaviors and most probably to have interest towards food and mealtimes (Farrow & Blissett, 2006).

1.2.3 Role-Modeling Feeding Style

Parents who use this style lead by example, demonstrating healthy eating behaviors and attitudes towards food. They prioritize nutritious food choices, practice mindful eating, and engage in positive food-related behaviors such as cooking meals at home, willing to try new foods, and enjoying a number of foods in moderation. By being a model for healthy eating, parents can influence their children's food preferences, attitudes, and habits. Parents who modeled healthy eating behaviors, for example taking fruits and vegetables, had children with higher intake of these food groups and overall healthier dietary patterns (Birch et al., 2001). Parental role modeling of healthy eating behaviors was associated with reduced risk of childhood obesity. Children who observed their parents eating nutritious

foods and practicing mindful eating habits were more probably to adopt similar behaviors and preserve healthy weigh (Ventura & Birch,,2008).

1.2.4 Educational Feeding Style

This style focuses on providing children with knowledge and information about nutrition, food choices, and healthy eating habits. Parents using an educational feeding style teach their children about the importance of different food chains, the significance of balanced meals, and the influence of food on person's health and well-being. They involve children in how to plan a meal, doing grocery shopping, and food making activities, empowering them to make informed choices and develop a lifelong appreciation for nutritious foods. Parents engaged in nutrition education activities, such as discussing the importance of balanced meals and teaching food labels, had better nutritional knowledge and were more likely to make healthier food choices (Faith et al.,2012).

1.2.5 Positive Reinforcement Feeding Style

In this style, parents use positive reinforcement and encouragement to promote healthy eating behaviors. They praise and reward their children for trying new foods, making healthy choices, and practicing good eating habits. Positive reinforcement can include verbal praise, small rewards, or non-food incentives, reinforcing desired behaviors and motivating children to continue making healthy choices. Parents who used positive reinforcement techniques, such as praising children for eating vegetables trying new foods, had children with more varied diets and higher consuming of fruits and8vegetables (Blissett et al., 2007). Positive reinforcement feeding style was linked to improved mealtime behaviors and reduced food-related conflicts (Loth et al., 2014).

1.2.6. Consistent and Structured Feeding Style

This style emphasizes consistency, routine, and structure in mealtime practices. Parents establish regular meal and snack times, create a predictable eating environment, and maintain consistent rules and expectations around food and eating behaviors. Consistency and structure help children develop a sense of stability, reduce anxiety yaround mealtimes, and encourage healthy eating routine. Parents who implemented consistent meal and snack schedules had

children with good dietary patterns, carrying good consumption of fruits, vegetables, and whole grains (Fulkerson et al., 2015).It's necessary to record these healthy eating styles are not exclusive to each other ,and many parents may indulge aspects of different styles based on their family's preferences, cultural background, and individual needs. The key is to prioritize nutritious food choices, positive attitudes towards food, and supportive mealtime practices that promote overall health and well-being in children. Numerous studies have highlighted the pros of authoritative feeding methods on children's health and development. For example,a study by Patrick et al. (2013) published in the Journal of the Academy of Nutrition and Dietetics found that children raised in households with authoritative feeding styles weremore probably to have healthier dietary patterns, including good eating of fruits, vegetables, and whole grains, and less consumption of sugary beverages and high-fat foods. Additionally, a longitudinal study by Shloim et al. (2015) in the journal Pediatrics showed that children of authoritative parents had lower rates of obesity and overweight9compared to children whose parents used other feeding styles, such as authoritarian or permissive styles.

1.3 Parent Unhealthy Feeding Styles

Unhealthy eating styles adopted by parents can have significant impacts on the psychological and physical health of children. Research has shown that certain feeding practices, such as restrictive feeding, emotional feeding, and chaotic feeding environments, can contribute to negative outcomes in children's eating behaviors, emotional well-being, and overall health. Parents who engaged in restrictive feeding practices, such as controlling portion sizes, limiting food choices, and using food as areward or punishment, had children with superior chances of food insecurity and increased risk of developing disordered eating behaviors, like binge eating and emotional eating (Jansen et al., 2012).The impact of chaotic feeding environments characterized by irregular meal times, inconsistent food availability and lack of structure during meals on eating behaviors of children and weight status. The findings revealed that children from chaotic feeding environments were more likely to have poor dietary habits, excessive intake of unhealthy foods, and increased risk of obesity (Berge et al., 2014).

1.3.1 Restrictive Feeding Style

This style involves controlling portion sizes, limiting food choices, and using food as a reward or punishment. Restrictive feeding styles were linked with more chances of food insecurity and increased risk of disordered eating behaviors in children (Faith et al., 2004).

1.3.2 Emotional Feeding Style

This style involves using food to soothe emotions or reward positive behaviors. Emotional feeding methods were linked with higher levels of emotional eating, emotional dysregulation, and negative mood states in children (Rollins et al., 2017).

1.3.3 Chaotic Feeding Style

This style is characterized by irregular meal times, inconsistent food availability, and lack of structure during meals. Chaotic feeding environments were associated with poor dietary habits, higher intake of unhealthy foods, and increased risk of excessive weight gain in children (Berge et al., 2014).

1.4 Feeding Control

Controlled feeding, within the context of eating behaviors, refers to a set of practices aimed at managing and regulating food intake (Gibson, 2012). This approach can encompass various strategies, such as portion control, calorie counting, following structured meal plans, or adhering to specific dietary guidelines (Vartanian et al., 2007). The motivations behind controlled feeding practices are diverse and may include weight management goals, health considerations, or the desire for

dietary structure and discipline (Crow & Agras, 1999).

One of the primary benefits of controlled feeding is its potential effectiveness in promoting weight management and overall health (Anderson et al., 2001). For individuals struggling for weight loss or maintain a healthy weight, monitoring food intake and practicing portion control can contribute significantly to achieving these goals. By being mindful of portion sizes and calorie consumption, individuals can create a balanced diet that supports their nutritional needs while preventing overeating.

Moreover, controlled feeding can be particularly beneficial for individuals with specific dietary requirements or health conditions (Musolino &

Warin, 2014). For example, individuals managing diabetes can benefit from carefully regulating carbohydrate intake, while those with food allergies can ensure they avoid allergenic foods through controlled feeding practices. This level of control allows for tailored dietary adjustments that support overall health and well-being.

Structured eating patterns and controlled feeding practices can also promote sense of order, routine, and discipline in one's diet (Gibson, 2012). This can lead to improved adherence to nutritional guidelines and healthier eating habits over time.

Research studies, such as the meta-analysis by Anderson et al. (2001) have shown that

structured meal plans and portion control strategies can be effective in achieving weight loss and improving metabolic outcomes. Despite these benefits, controlled feeding approaches may also present challenges and potential negative effects (Vartanian et al., 2007). Excessive control or rigid dietary restrictions can lead to feelings of deprivation and anxiety around food. This can contribute to the development of disordered eating patterns, such as orthorexia (an obsession with healthy eating) or binge eating as a response to restrictive eating periods

(Crow & Agras, 1999).

Furthermore, overly strict control feeding practices may not always be sustainable or enjoyable in the long term (Musolino & Warin, 2014). Individuals may experience difficulties maintaining these rigid dietary habits, leading to fluctuations in weight and overall dissatisfaction with their eating patterns. It's essential to strike a balance between managing food intake for health purposes and maintaining a positive relationship with food that includes enjoyment, flexibility, and mindfulness. Controlled feeding plays a significant role in shaping eating behaviors and dietary habits. While it offers benefits such as weight management and structured meal planning, it's essential to approach controlled feeding practices

mindfully and avoid extremes that may lead to negative consequences. Finding a balance that promotes both health and a

positive relationship with food is key to sustainable and fulfilling eating habits (Katz, 2009).

1.4.1 Positive Aspects of Feeding Control

One of the positive aspects of control feeding is its potential effectiveness in promoting weight management and overall health. For people seeking to lose weight or try to maintain a healthy weight, monitoring food intake and practicing portion control can contribute to a balanced diet and prevent overeating. Control feeding can also be beneficial for individuals with specific dietary needs, such as managing diabetes or food allergies, as it allows for careful selection and regulation of food choices. Moreover, structured eating patterns and control feeding practices can instill a sense of order, routine, and discipline in one's diet, which may lead to improved adherence to nutrition guidelines and healthier eating habits in the long term. Research has shown that structured meal plans and portion control strategies can be effective in achieving weight loss and improving metabolic outcomes (Anderson et al., 2001). **Weight Management.** Feeding control strategies, such as portion control and calorie monitoring, can be effective in promoting weight management and preventing excessive calorie intake (Rolls, 2009).¹³

Nutritional Balance. Controlled feeding allows individuals to maintain a balanced diet by ensuring adequate intake of essential nutrients, vitamins, and minerals (Archer et al., 2018).

Metabolic Health. Structured meal plans and controlled feeding practices contribute to improved metabolic health, including better blood sugar control and lipid profiles (Anderson et al., 2001).

Disease Prevention. Feeding control can help reduce the danger of chronic diseases like diabetes, cardiovascular disorders, and obesity-related conditions (Katz, 2009).

Portion Awareness. Individuals develop a heightened awareness of portion sizes and learn to make healthier food choices, leading to long-term dietary improvements (Vartanian et al., 2007).

Behavioral Discipline. Controlled feeding fosters discipline and adherence to dietary guidelines, promoting healthier eating habits and reducing impulsivity in food choices (Gibson, 2012).

1.4.2 Negative Aspect of Feeding Control

Controlling feeding practices in children can have several negative aspects, leading to potential adverse effects on their physical and psychological well-being.

Increased Risk of Disordered Eating Behaviors.

Research suggests that overly controlling feeding styles, such as restrictive feeding or force to eat, may contribute to expansion of disordered eating attitudes in children. Parental control over feeding was linked with increased risk of disinherited eating patterns and higher level of child eating in the absence of hunger (Birch & Fisher, 2000).

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Decreased Self-Regulation. Constant external control over feeding can hinder children's capability to self-control their food consumption based on hunger and repletion. This deficit of self-regulation may cause overeating or under eating, both of which can have negative consequences for a child's health.

Children with lower self regulation were more likely to exhibit problematic eating behaviors when exposed to controlling feeding practices (Webber et al., 2010).

Negative Impact on Food Preferences. Controlling feeding style has impact on children's food preferences and attitudes towards eating. Parental strictness to eat certain foods was linked with increased dislike for those foods in children, potentially leading to a limited variety of foods consumed and decreased overall dietary quality (Patrick et al., 2005).

Psychological Effects. Constant monitoring and control over feeding can contribute to psychological stress in children, impacting their overall well-being. Controlling feeding exercises were linked to chief levels of stress and less levels of emotional well-being in children, highlighting the negative psychological impact of such practices (Gable et al., 2007).

Risk of Eating Disorders. Prolonged exposure to controlling feeding practices during childhood had linked to rise chance of developing eating disorders in later life. Parental control over feeding in childhood was linked with chief odds of developing eating disorder symptoms in adolescence and early adulthood (Loth et al., 2020). These negative aspects underscore the importance of promoting responsive and supportive feeding practices that encourage children to develop

healthy eating habits based on their own internal cues and preferences.¹⁵

1.4 Psychopathology

Psychopathology refers to the study of mental disorders, their causes, manifestations, and treatments (American Psychiatric Association, 2013). It includes broad range of conditions that has effect on thoughts, emotions, behaviors, and overall psychological functioning. Understanding psychopathology is crucial for mental health professionals, researchers, and individuals seeking to address and manage mental health issues effectively. This discussion will delve into the concept of psychopathology, its classification, etiology, assessment, and treatment, supported by relevant literature references. The etiology of psychopathology is multi factorial, involving complex interactions between biological, psychological, social, and environmental factors (Beck et al., 1996). Biological factors include genetics, neurochemistry, and neurobiology, with research highlighting the role of neurotransmitters, brain structure, and function in various mental disorders. For

instance, studies have linked abnormalities in serotonin and dopamine systems to mood disorders like depression and bipolar disorder. Assessment of psychopathology involves comprehensive evaluation to diagnose and understand the nature and severity of mental health issues (Kroenke et al., 2006). Assessment tools vary depending on the presenting symptoms and suspected disorders. Clinical interviews, self-report questionnaires, observation, and psychological testing are commonly used methods. Treatment approaches for psychopathology include a variety of interventions designed to reduce symptoms, promote functioning, and improve overall well-being (Bandelow et al., 2017). Evidence-based treatments include psychotherapy, pharmacotherapy, and psychosocial interventions tailored to individual needs and diagnostic profiles. Psychotherapy, Cognitive Behavior Therapy (CBT), dialectical behavior therapy (DBT), psychodynamic therapy, and interpersonal therapy, targets maladaptive thoughts, emotions, and behaviors underlying mental disorders. These

therapies emphasize cognitive restructuring, emotion regulation, problem-solving skills, and interpersonal communication to promote adaptive coping and symptom reduction. The effect of parental feeding style and feeding control on psychopathology in children is a

critical area of study within the field of developmental psychology and mental health. Parental feeding exercises can significantly influence children's eating behaviors, attitudes towards food, and overall psychological well-being. This discussion will explore how different feeding styles and control mechanisms employed by parents can contribute to psychopathology in children, supported by relevant literature references.

Parental feeding styles, like authoritative, authoritarian, permissive, and negligent styles, play a significant role in shaping children's eating behaviors and emotional responses to food (Birch & Fisher, 2000).

The authoritative style, marked by a balance of structure, warmth, and responsiveness, promotes healthy eating habits and positive food attitudes. In contrast, authoritarian and permissive styles, marked by excessive control or lack of structure, may lead to disordered eating patterns and emotional difficulties related to food. Feeding control refers to the degree of parental involvement and restriction in children's eating behaviors. Excessive control, such as forcing children to eat or blocking certain foods, can have negative consequences on children's psychological well-being and relationship with food (Webber et al., 2010).¹⁷

Researchers have shown that parental control over feeding is linked with increased risk of disinhibited eating behaviors, emotional eating, and body dissatisfaction in children (Rodgers et al., 2013). The effect of parental feeding styles on psychopathology in children extends beyond eating disorders to encompass broader mental health issues. For example, study suggests that children had exposure of controlling feeding practices may experience chief levels of anxiety, depression, and stress related to food and body image (Gable et al., 2007). These negative emotional responses can contribute to the development of psychopathology, including mood disorders, anxiety disorders, and low self-esteem. It is essential for parents to adopt responsive and supportive feeding practices that

promote autonomy, healthy food choices, and positive mealtime experiences for children (Patrick et al., 2005). Encouraging a balanced approach to eating, fostering open communication about food preferences, and modeling healthy eating behaviors can mitigate the risk of psychopathology linked with feeding control. Parental feeding style and feeding control significantly influence children's eating behaviors and psychological

wellbeing, potentially contributing to psychopathology such as eating disorders, anxiety, and depression. Appreciating the effect of parental feeding practices on children's mental health is crucial for forwarding healthy development and averting long-term psychopathological outcomes.

1.6 Summary

The interplay between parenting feeding styles, feeding control, and psychopathology is a crucial aspect of child development and mental health. Parenting feeding styles, including authoritative, authoritarian, permissive, and neglectful styles, significantly impact children's eating behaviors, attitudes towards food, and emotional relationship with eating. Authoritative feeding styles, characterized by warmth, structure, and responsiveness, are associated with positive outcomes such as healthier eating habits and better psychological well-being. In contrast, authoritarian and permissive feeding styles may lead to negative outcomes like disordered eating patterns and emotional

distress related to food. Feeding control, which encompasses practices like strictness, force to eat, and encouragement of autonomy in food choices, also plays an important role in shaping eating attitudes of children and psychopathological risk. Excessive control can lead to issues such as disinhibited eating behaviors, emotional eating, and body dissatisfaction.

Furthermore, parental feeding practices can influence broader psychological health issues in children, adding anxiety, depression, and low self-esteem. It is crucial for parents to adopt responsive and supportive feeding practices that

promote autonomy, healthy food choices, and positive mealtime experiences. Encouraging a balanced approach to eating, fostering open communication about food preferences, and modeling healthy eating behaviors can help mitigate the risk of psychopathology associated with feeding control. Recognizing the impact of parenting

feeding methods and feeding control on children's mental health is essential for promoting healthy development and preventing long-term psychopathological outcomes. By creating nurturing and supportive feeding environments, parents can contribute significantly to their children's overall well-being and psychological resilience. Overall,

This introduction provides an overview of different parenting feeding styles, reviews previous research

evidence linking these styles to psychopathology, and outlines the significance of understanding these relationships for promoting optimal psychological and physical health outcomes.

Chapter II

Literature Review

This chapter provides a detailed overview of the local and international studies conducted to explore an important role in shaping their children's attitudes towards food preferences and intake patterns, both directly and indirectly. This influence can range from controlling what the child eats to serving as a model for healthy or unhealthy eating habits (Birch & Fisher, 1998; Brown & Ogden, 2004; Cooke et al., 2004; Clark et al., 2007; Beydoun & Wang, 2009; Larsen et al., 2015).

2.1 Parental Feeding Styles

This review focuses on parenting or feeding styles and specific feeding practices that may impact a child's body mass index. Parenting method is a broad attitudes concept that establishes the emotional environment in which parents interact with their children. Parents who enforce extra discipline and strictness on their children often lead them towards emotional detachment, instill antisocial behaviors, foster passive aggressiveness, overlook self-harming behaviors, and create emotional distance. Punitive, hostile, shaming, rejecting, or overcontrolling parenting practices are significantly linked to the development of aggression. This trend is observed not only in Western cultures but also in non-Western cultures like India. In Asian cultures, parents emphasize discipline and expect obedience from their children, leading to conflicts when children seek autonomy. While some parents are adopting more lenient parenting styles, approximately 11% of Indian parents still follow authoritarian parenting (Howenstrein, Kumar & Yin, 2015). This authoritarian attitude, which values obedience, respect for authority, and strictness, is more prevalent in Asian cultures compared to Western cultures, contributing to the perpetuation of authoritarian parenting practices. Other maladjustment parenting practices, particularly those marked as punitive, hostile, guilt, rejecting, or overcontrolling, are strongly associated with the development of various aggression patterns (Perris et al., 1983). This correlation is evident not only in Western cultures but also in non-Western cultures (Damon & Lerner, 2008; Howenstrein et al., 2015). Authoritarian parenting

behaviours, which emphasize obedience, respect for authority, and strictness, are more prevalent among Asian parents compared to their Western counterparts. This is due to a greater emphasis on interdependence in Asian cultural groups, leading to socialization practices that promote an authoritarian parenting style (Lansford et al., 2018). Feeding issues are a common occurrence during childhood, a crucial period for physical growth, neural development, and the formation of eating behaviors that will persist into adulthood (Wattick et al., 2023). Research suggests that between 20% and 60% of parents express concerns about their children's feeding habits, which can lead to temporary or ongoing challenges that may impact family dynamics (Fishberg, 2018). These challenges often revolve around behavioral aspects like food preferences, portion sizes, or underlying medical conditions, collectively known as feeding difficulties (Fishberg & Dratwa, 2018). Both mothers and fathers play an important role in shaping the food environment and socialization of their children (Masento et al., 2022). Studies indicate that parental characteristics, reactions to feeding-related issues, and the overall food environment can have a positive or negative effect on children's habits and health (Masento et al., 2022).²²

Parenting approach encompasses a set of parental behavior and beliefs regarding childrearing, establishing an emotional atmosphere that shapes parental practices (Alawariz et al., 2016), including the quality of parent-child relations.

Research highlights the significance of including fathers in studies related to parenting, given their impact on eating habits and increased involvement in children's lives and eating routines. Nevertheless, the existing literature in the realm of children's nutrition has predominantly relied on data from mothers, thus fewer insights from the underrepresented fathers (Davison et al., 2016). Understanding attitudes, behaviors, and dynamics in feeding, with consideration for both fathers and mothers, is essential for comprehending the factors contributing to FD in children and for helping families develop a healthy relationship and improved eating behaviors (Guerrero et al., 2016). This study is designed to fill the gap in the literature by examining the characteristics of children, parents, and mealtime exercises related to FD as reported by fathers and mothers, and by identifying parenting styles, mealtime actions, practices, and factors associated with FD in children. In another study

conducted by Bante et al., (2008) identified that parents play a significant role in shaping a child's eating habits by controlling the food environment. It is important for parents to share this control with the child, allowing them to learn how to self-control their intake and develop healthy eating patterns. Unfortunately, some parents

resort to autocratic or coercive feeding practices, which can hinder a child's ability to self-regulate. These practices include

controlling what the child eats, restricting certain foods, pressuring the child to eat, and using reward systems. These practices not only impact immediate food intake but also influence long-term food preferences and eating habits.²³

The frequency and type of feeding practices are influenced by various factors such as age, economic status, and environment. This study aims to examine the inappropriate feeding practices used by parents of preschoolers in rural areas and their impact on children's preferences for fruits and vegetables (Bante et al., 2008).

2.2 Feeding Control

Bernard (1855) study findings highlighted that eating behavior is considered a component of the behavioral regulation of body weight, as described by Richter. This perspective sees food intake as a means of supplying energy, influenced by metabolic demands to replenish energy stores. The concept suggests that internal signaling systems

control eating behavior to maintain stability in the internal environment. However, it is now recognized that energy intake is not as strictly regulated in contemporary environments as previously thought. Responses to negative energy balances are more pronounced than to positive ones, and eating behavior is influenced by various

physiological, environmental, social, and cultural factors. Therefore, strict regulation of food or energy intake on a daily basis may not be expected in modern settings (Bernard, 1855).

Michie (2016) study highlighted the management of appetite is commonly perceived to function within an energy balance framework for regulating body weight. However, it is crucial to note that appetite control is not solely determined by energy balance. Eating, which encompasses food, energy, and nutrient intake, is a type of behavior. Similar to other voluntary behaviors, the

factors influencing changes in eating behavior are intricate and can be explained by behavior change models.²⁴ While changes in energy expenditure and its components respond significantly to energy deficits, alterations in energy intake (EI) are likely to have a greater impact on energy balance and body composition. There is a growing belief that the increase in food intake linked to the obesity epidemic is primarily driven by hedonic rather than homeostatic mechanisms (Polidori-D et al., 2016). Penicaud et al., (2016) in their study investigated that ingestive behavior is influenced by three main mechanisms: homeostatic, hedonic, and cognitive. The sensory perception of food, including taste, odor, texture, and temperature, plays a central role in the decision to ingest or reject food. The processing of sensory input (perception) is a multifaceted, multimodal procedure. The search for food and its consumption are additionally impacted by recollections of the sensory, olfactory, and post-ingestive consequences of past experiences with a comparable substance; and emotional, cognitive, and social elements such as culture and environment. The objective of this section is to elucidate some of these processes and their temporal progression throughout the digestive process.

2.3 Psychopathologies

Previous investigations have underscored the influential role of parent feeding behaviors in shaping children's eating habits, weight status, and psychological well-being (Rodger set al., 2013; Webber et al., 2010). Additionally, findings suggest a correlation between certain parental feeding styles, such as authoritarian or permissive approaches, and adverse psychological outcomes, including increased risk for eating disorders, anxiety, and behavioral problems among children (Birch & Fisher, 2000; Rodgers et al., 2013).²⁵

2.4 Relationship between Parenting Feeding Styles, Feeding Control and Psychopathologies

Applying a moderate level of control, such as always check unhealthy snack intake, is a healthy and functional strategy for parents to manage their children's food intake appropriately. However, extra control over children's food intake has been linked to gratification eating (e.g., Fisher & Birch, 1999; Birch, Fisher & Davison, 2003) and weight issues at both ends of the spectrum (e.g., Faith et al., 2003; Farrow &

Blissett, 2006). While findings vary regarding the negative effect of extreme control on child weight (see Clark, Goyder, Bissell, Blank & Peters, 2007; Montgomery, Jackson, Kelly &

Reilly, 2006), longitudinal research indicate that highly restrictive feeding approaches are consistently associated with child obesity (e.g., Clark et al., 2007), and that monitoring feeding practices are linked to slower weight gain (e.g., Faith et al., 2004). Factors such as genetic risk, ethnicity and cultural practices, socioeconomic status, and education may

moderate the influence of feeding practices on weight outcomes (e.g., Clark et al., 2007; Faith et al., 2003; Faith et al., 2004). Some studies have started to explore whether a parent's feeding style reflects a broader parenting style or is specific to the feeding domain. Research suggests that parents' feeding practices are broadly linked with their overall parenting styles (Hughes et al., 2005), and that these parenting styles are good predictors of children's BMI, fruit and vegetable intake, healthier eating habits, physical activity, and sedentary behaviors (e.g., Rhee et al., 2006; Kremers et al., 2003; Schmitz et al., 2002). The idea that feeding styles may be an extension of more general parenting styles is supported by a study by Hughes²⁶ and colleagues, who found that more controlling parenting styles were associated with more authoritarian feeding styles, while authoritative feeding styles were related to greater parental responsiveness to children (Hughes et al., 2005). Hughes et al. (2005) in their study also identified that authoritative parents were more probably to monitor their children's food consumptions compared to minor authoritative parents, and that children with indulgent parents had higher BMIs than those with authoritarian parents. Moreover, Duke and colleagues found that parental forces to eat were linked with authoritarian parenting in parents of 7-year-old sons (Duke et al., 2004). Several studies have present that children and adolescents intake higher levels off fruits and vegetables if they have authoritative parents or parents who use an authoritative feeding methods (e.g., Kremers et al., 2003; Patrick et al., 2005). Parenting approaches may also affect the impact of weight gain intervention programs; a recent study suggested that a permissive parenting style negatively affected children's weight loss in family based interventions (Golan, 2006).

However, some studies have not found support for the links between child BMI, parenting method, and

feeding practices. For example, Brann and Skinner (2005) did not find significant differences in the parenting styles of children in low or high BMI groups and did not find a relationship between feeding practices and parenting styles. Furthermore, (Montgomery et al. 2006) failed to find significant evidence for a link between parental control and child weight status or energy intake in a UK sample of 4-year-old children. This inconsistency in the literature warrants further investigation.

Some of the discrepancies may be explained by differences in study methods, measures, sample sizes, and participant differences in cultural background, education, socioeconomic status, age, and BMI status.

Few studies have attempted to control for other factors established as predictors of controlling feeding practices, such as breastfeeding, eating psychopathology, and parent or child BMI. Mothers who breastfed their children have been shown to exhibit and report lower levels of subsequent control over their children's eating (Farrow & Blissett, 2006b; Fisher et al., 2000; Taveras et al., 2004). Both mothers and fathers with nonclinical levels of eating psychopathology have been shown to be more controlling over their children's eating, particularly their daughters' food intake (Blissett et al., 2006). Mothers with eating disorders have been shown to exhibit more maladaptive, intrusive, and controlling behavior at mealtimes (Cooper et al., 2004). Maternal eating disorder pathology has also been related to less sensitive, more

commanding parenting styles outside of mealtimes (Stein et al., 2001), suggesting another explanation for the link between parenting and feeding styles. While children's MI has been linked with controlling feeding practices, findings are inconsistent (Brann & Skinner, 2005; Clark et al., 2007; Montgomery et al., 2006). Furthermore, obese parents have been shown to exhibit less control over their children's food intake (Wardle et al., 2002), while other studies have not found a link between parental BMI and child feeding practices (Faith et al., 2003).

2.5 Middle Aged Children

Furthermore, the interplay between parenting feeding styles, feeding control, and psychopathologies becomes more pronounced during middle age as individuals continue to carry forward their early eating patterns and psychological vulnerabilities. Longitudinal studies have shown that children raised in environments characterized

by authoritative feeding styles and balanced feeding control are more likely to maintain healthy eating behaviors and psychological well-being into adulthood (Speddens et al., 2011). Conversely, individuals who experienced maladaptive feeding styles and control mechanisms during childhood may be at higher risk of developing psychopathologies such as eating disorders, obesity, and mood disorders later in life (Haines et al., 2006). Parenting feeding styles and feeding control significantly influence children's eating behaviors and psychological health, with implications extending into middle age. Adopting an authoritative feeding style and promoting a balanced approach to feeding control can contribute to the development of healthy eating habits and decrease the risk of psychopathologies in later life.

2.6 Summary

In summary, parenting feeding styles and feeding control during childhood significantly influence an individual's relationship with food and mental health outcomes in middle age. Adopting an authoritative feeding style with balanced levels of control and responsiveness is generally associated with healthier eating behaviors and lower risks of psychopathology in adulthood.

2.6 Rationale of the Study

The impetus for conducting this study stems from the developing body of research indicating the profound effect of parental feeding styles and feeding control on the psychopathological development of children in middle childhood (Birch & Fisher, 2000; Farrow & Blissett, 2008; Sladdens et al., 2016). Previous investigations have underscored the influential role of parent feeding behaviors in shaping children's eating habits, weight status, and psychological well-being (Rodgers et al., 2013; Webber et al., 2010). Additionally, findings suggest a correlation between certain parental feeding

styles, such as authoritarian or permissive approaches, and adverse psychological outcomes, including increased risk for eating disorders, anxiety, and behavioral problems among children (Birch & Fisher, 2000; Rodgers et al., 2013). However, the literature also reflects inconsistencies and gaps in understanding the nuanced relationships between specific feeding styles, feeding control, and the diverse spectrum of

psychopathologies within the context of middle-aged children (Birch & Fisher, 2000; Farrow & Blissett, 2008; Webber et al., 2010). Hence, this study aims to address these gaps by examining, within the context of middle-aged children (6-12 years), the distinct impact of various parental feeding styles and feeding control on the manifestation of psychopathologies. By delving deeper into these relationships, this study endeavors to contribute to a more comprehensive understanding of the intricate relation between parental feeding practices and the psychological well-being of children during this critical developmental stage.³⁰

2.7 Objectives of the study

- To investigate the relationship between parental feeding styles, feeding control and psychopathology in middle-aged children.
- To identify the predicting role of parental feeding styles and feeding control in the

2.9 Conceptual Framework of the Study

development of psychopathology.

- To identify the mediating effect of feeding control in the relationship between parental feeding styles and psychopathology.

2.8 Hypotheses

H1: There is likely to be a positive relationship between parental feeding styles, feeding control and psychopathology in middle aged children.

H2: The parental feeding styles and feeding control would predict psychopathy in middle aged children.

H3: Feeding control would mediate the relationship between parental feeding styles and psychopathology in middle aged children.

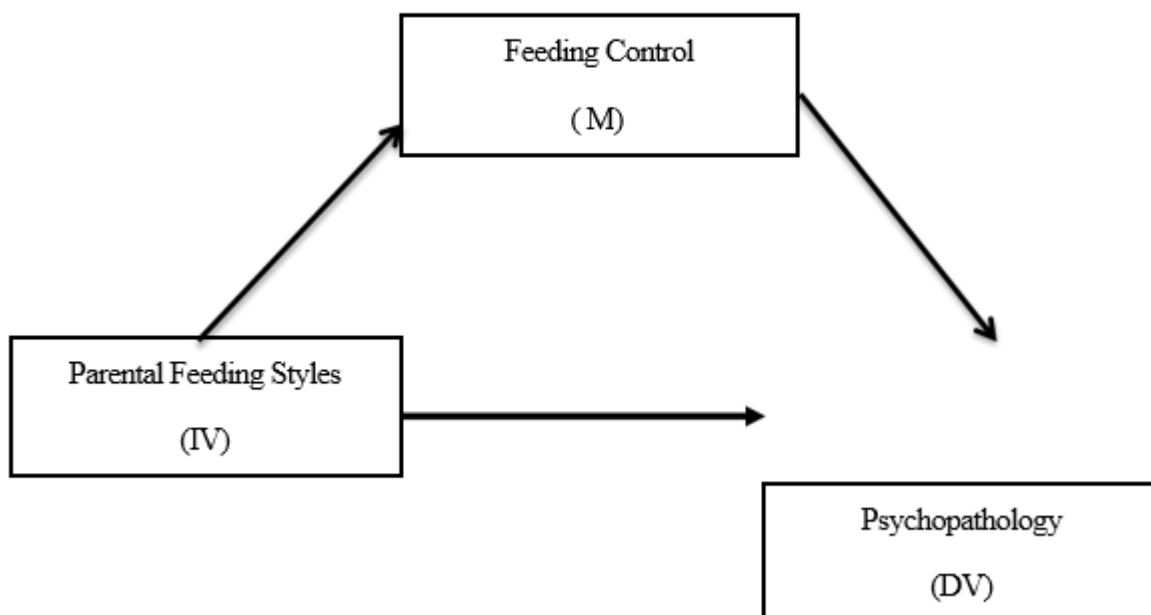


Figure 1. Mediation Model of Parental Feeding Styles, Feeding Control and Psychopathology in Middle Aged Children.³²

Chapter III

Method

This chapter focused on the procedure that was carried out while conducting the research. This chapter comprises of elaborated research design and sample included in the study. Description of demographic characteristics is also provided.

Information regarding assessment measures and procedure is also given.

3.1 Research Design

The co-relational study design was used to investigate the association between Parenting feeding styles and feeding control in relation to psychopathology in middle aged children.

3.2 Sampling Technique and Sample

Purposive Sampling technique was used to select the participants of the study. The data was collected from the parents of children with diagnosed psychopathologies taken from special education institutes of Lahore. G-Power was used to identify the total number of participants ($N = 80$).

3.2.1 Inclusion Criteria

The children with the age range of 6 to 12 years were included in this sample. The children who have any type of psychopathologies were included in this sample.

3.2.2 Exclusion Criteria

The children who have physical disabilities were excluded from this sample.³³ The Table 1 information reflects data on a group of 80 children aged between 6 to 12 years among them (43%) are girls, and almost (56%) are boys. The majority of these children (75%) have been diagnosed with an intellectual disability. Other diagnoses in the³⁴ group include Autism Spectrum Disorder (13.8%), Attention Deficit/Hyperactivity

Disorder (5%), and Down syndrome (6.3%). In terms of family system, (53.8%) of the children come from nuclear families, while the remaining 46.3% are part of joint family systems.

3.3 Assessment Measures

3.3.1 The Parent Feeding Style Questionnaire (Noor, 2005)

The parenting feeding style questionnaire is a tool used to assess how parents approach feeding their children. These questionnaires can help identify which feeding style a parent predominantly uses: authoritative, authoritarian, permissive, or neglectful.

Such assessments can be valuable for researchers, healthcare professionals, and parents themselves to understand and improve feeding practices. It is a five Likert scale for example Strongly disagree=1, Disagree=2, Neutral=3, Agree=4 and Strongly agree=5.

The alpha reliability of the scale is $\alpha = .84$.

3.3.2 The Child Feeding Questionnaire (Birch et al., 2001)

The Child Feeding Questionnaire (CFQ) is a widely used tool designed to assess parental attitudes, beliefs, and practices regarding child feeding and their potential influence on children's eating behaviors and weight. The alpha reliability of the scale is $\alpha = .87$.

3.3.3 Child Behavior Checklist (Achenbach et al., 1995)

The Child Behavior Checklist (CBCL) is a widely used tool for assessing emotional and behavioral problems in children. It is commonly used in clinical, research, and educational settings to identify potential psychological problems and plan appropriate interventions. A list of specific behaviors and symptoms that parents rate based on their³⁵ observations of the child over the past six months. These items are rated on a three-point scale (1 = Not True, 2 = somewhat or Sometimes True, 3 = Very True or Often True). The alpha reliability of the scale is $\alpha = .92$.

3.4 Operational Definitions

3.4.1 Parental Feeding Styles

Parental Feeding Styles refer to the ways in which parents interact with their children around food and meals. It includes the strategies parents use to control what, when, and how much their children eat (Patrick et al., 2005).

3.4.2 Feeding Control

Feeding control refers to the strategies and methods parents use to regulate their children's eating behaviors. It can be restrictive, pressuring, or monitoring in nature (Birch et al., 2001).

3.4.3 Psychopathologies in Middle-Aged Children

It will focus on symptoms and behaviors associated with various disorders including but not limited to anxiety, depression, attention-deficit/hyperactivity disorder (ADHD), conduct disorders, and eating disorders within the specified age group (Diagnostic and Statistical Manual of Mental Disorder, 2013).

3.5 Procedures

Firstly, permission was obtained from the respective authors to use the assessment measures. Data collection commenced after receiving official approval from the authors and respective universities. Participants were asked to complete the informed consent and screening forms. Clear instructions were provided, and the questionnaires were distributed accordingly. Participants were informed about their rights to withdraw, as well as the measures taken to ensure their anonymity and confidentiality. They were given as much time as needed to complete the questionnaire protocol. After completing the process, participants were thanked for their cooperation. Following data collection, the

data was entered into the Statistical Package for Social Sciences (SPSS), and the results were then concluded.

3.6 Procedures

In order to conduct this research, some ethical considerations were kept in mind.

- Permission was obtained from the authors for using the questionnaires.
- Permission was secured from the heads of concerned departments for data collection.
- Participants were assured of the confidentiality of their personal information and responses.
- It was ensured that no psychological, emotional, or mental harm would come to the participants of this research.
- Each participant had the right to withdraw from the research at any time.

Chapter IV Results

This chapter is highlighting the psychometric properties of study measure and testing of main and secondary hypotheses.

Table 1

Demographic Characteristics of Participants (N=80)

Variables	<i>f</i>	<i>%</i>	<i>M</i>	<i>SD</i>
Age			8.90	1.972
6-12 Years	80	100		
Gender				
Girls	34	43.8		
Boys	45	56.3		
Diagnosis				
Intellectual Disability	60	75.0		
Autism spectrum	11	13.8		
Attention deficit/Hypertension disorder	4	5.0		
Down syndrome	5	6.3		
Family system				
Nuclear	43	53.8		
Joint	37	46.3		

Table 2

Psychometric Properties of Parenting Feeding Questionnaire, Child Feeding

Questionnaire, Child Behavior Checklist (N=80)

<i>Scale</i>	<i>K</i>	<i>M</i>	<i>SD</i>	<i>Actual</i>	<i>Potential</i>	<i>α</i>
				<i>Range</i>	<i>Range</i>	
Parenting	27	96.29	21.91	31-135	27-135	.92
Feeding						
Questionnaire						
Child	31	101.96	14.66	67-127	31-155	.89
Feeding						
Questionnaire						
Child	110	177.01	28.76	124-273	110-330	.94
Behavior						
Checklist						

The Table 2 shows that the reliabilities of the scales are excellent, as indicated by their high reliability coefficients. The Parenting Feeding Questionnaire (PFQ) has a reliability coefficient of $\alpha = .928$, demonstrating exceptional internal consistency. The Child Feeding Questionnaire (CFQ) also shows strong reliability with a coefficient of $\alpha = .891$,

indicating good internal consistency. The Child Behavior Checklist (CBCL) has a very high reliability coefficient of $\alpha = .94$, reflecting excellent internal consistency. These high reliability scores suggest that the scales are consistent and dependable measures of their respective constructs.

Table 3

Correlation among Parental Feeding Styles, Feeding Control and Psychopathology in

Middle Aged Children (N=82)

Variables	1	2	3	4	5	6
Parenting Feeding Style						
Questionnaire						
1. Instrumental Feeding	-	.61***	.72***	.66***	.50***	.45***
2. Control Feeding	-	-	.46***	.80***	.48***	.25**
3. Emotional Feeding	-	-	-	.63***	.31**	.34**
4. Encouragement Feeding	-	-	-	-	.35**	.16*
5. Feeding control	-	-	-	-	-	.38**
6. Psychopathology	-	-	-	-	-	-

Note. * $p < .05$, ** $p < .01$ *** $p < 0.01$

Table 3 shows that instrumental feeding style has a moderate positive relationship with child feeding control and psychopathology. Control feeding style is highly ($p < 0.00$) correlated with encouragement feeding, suggesting these styles often co-occur. It also shows moderate associations with instrumental and emotional feeding, as well as child feeding control but a weaker association with psychopathology. Emotional feeding style is strongly linked with encouragement feeding and moderately linked with instrumental and control feeding. It has weaker, but still significant, associations with child feeding control and psychopathology. Encouragement

feeding style, while highly correlated ($p < 0.001$) with control feeding, shows moderate ($p < 0.05$) associations with instrumental and emotional feeding styles. Its relationship with child feeding control is weak, and it has a very weak association with psychopathology. The results highlight that various parenting feeding styles are interrelated, with instrumental and control feeding styles showing strong inter-correlations with other styles. These feeding styles also moderately impact child feeding practices and behavior. Encouragement feeding, while strongly associated with control feeding, shows weaker correlations with child outcomes.

Table 4

Hierarchical Regression Results for Psychopathology in Middle Aged Children (N=80)

Predictor	B	β	t	95 % CI		R ²	ΔR^2	P
				LL	UL			
Step 1						.11	.11	.24
Age	2.17	.14	1.30	-1.13	5.48			
Gender	.08	.00	.01	-13.20	13.38			
Family System	-1.36	-.02	-.20	-14.63	11.91			
Step 2						.32	.20	.00
1. Instrumental Feeding	3.15	.43	2.54	.67	5.63			
2. Control Feeding	1.02	.32	1.77	-.12	2.18			
3. Emotional Feeding	1.14	.17	1.07	-.97	3.25			
4. Encouragement Feeding	-2.05	-.55	-2.67	-3.58	-.52			
Step 3						.34	.02	.11
Feeding Control	.39	.20	1.61	-.09	.88			

Table 4 indicates that a hierarchical multiple regression analysis was conducted to investigate the predictors of psychopathology in a sample of participants. The predictors included demographic variables (Age, Family system, Gender) and parental feeding styles including (F1 Instrumental feeding, F2 Control feeding, F3 Emotional feeding, F4 Encouragement feeding) and feeding control. In the first step, demographic variables were entered into the model. These predictors accounted for 11.5% of the variance in psychopathology, ($R^2 = .11, p = .24$). None of the predictors were statistically significant. The second step included the parental feeding styles including (F1 Instrumental feeding, F2 Control feeding, F3 Emotional feeding, F4 Encouragement feeding). This model explained an

additional 20.5% of the variance in psychopathology, ($\Delta R^2 = .20, p = .001$), resulting in a total of 32.1% variance explained, ($R^2 = .32$). Significant predictors in this step were F1 Instrumental feeding ($\beta = .432, p = .013$) and F4 Encouragement feeding ($\beta = -.556, p = .009$). The inclusion of parental feeding styles improved the model significantly. In the final step, the variable feeding control was added to the existing model. This step explained an additional 2.5% of the variance in psychopathology, ($\Delta R^2 = .02, p = .11$), resulting in a total of 34.6% variance explained, ($R^2 = .34$). Overall, in the final model, significant predictors were F4 Encouragement feeding ($\beta = -.48, p = .02$) and marginally, F1 Instrumental feeding ($\beta = .331, p = .069$).

4.1 Mediation Analysis

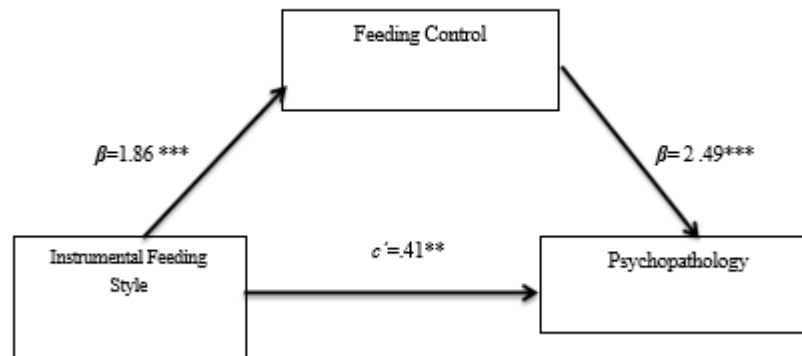


Figure 2. Mediation Model of Instrumental Feeding Styles, Feeding Control and Psychopathology in Middle Aged Children43

Table 5

Regression Coefficient, Standard Error and Model Summary Information for Instrumental Parenting Style, Feeding Control and Psychopathology in Middle Aged

Children (N=80)

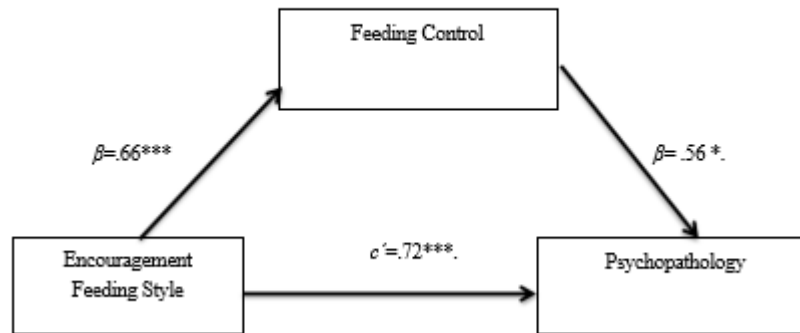
Antecedent	M (Feeding Control)			Y(Psychopathology)		
	B	SE	p	B	SE	p
X (Instrumental Parenting Style)	1.86	0.36	0.00	2.49	0.84	0.00
M (Feeding Control)	-	-	-	0.41	0.23	0.04
				R ² =0.25		R ² =0.23
				f=26.01, p=0.00		f=11.61, p=0.00

Table 6

Indirect Effects of Instrumental Parenting Style on Psychopathology through Feeding Control in Middle Aged Children (N=80)

Effects	B	SE	% CL	
			Bootstrap 95 LL	UL
Instrumental Feeding -> Feeding Control	0.76	0.37	0.16	1.65

->Psychopathology



This is the estimated indirect effect of Instrumental Parenting Style on Psychopathology through Feeding Control. A positive coefficient of ($\beta = 0.48$) indicates

that as Instrumental Parenting Style increases, it indirectly leads to an increase in Psychopathology through its effect on Feeding Control.

Table 7

Regression Coefficient, Standard Error and Model Summary Information for

Encouragement Parenting Style, Feeding Control and Psychopathology in Middle Aged Children (N=80)

Antecedent	M (Feeding Control)			Y(Psychopathology)		
	B	SE	p	B	SE	p
X (Encouragement Parenting Style)	0.66	0.20	0.00	0.56	0.42	0.05
M (Feeding Control)	-	-	-	0.72	0.22	0.00
	R ² =0.125			R ² =0.145		
	f=11.101, p=0.001			f=6541, p=0.002		

Table 8

Indirect Effects of Instrumental Parenting Style on Psychopathology through Feeding Control in Middle Aged Children (N=80)

Effects	B	SE	Bootstrap 95% CL	
			LL	UL
Encouragement Parenting Style ->Psychopathology	0.48	0.20	0.12	0.95

The above table indicates that encouragement parenting style has a positive and statistically significant effect on feeding control. Encouragement parenting style also has a positive and statistically significant direct effect on psychopathology, but the significance level is marginal ($p = 0.05$). Feeding control has a positive and statistically significant

effect on psychopathology ($\beta = 0.72, p < 0.001$). This suggests that increased feeding control is associated with higher levels of psychopathology in children. This mediation table suggests that Feeding Control significantly mediates the relationship between encouragement Parenting Style and Psychopathology in children. The encouragement parenting style positively influences feeding control, which in turn, increases the likelihood of psychopathological outcomes. While there is a direct effect of encouragement parenting style on psychopathology, it is less pronounced than the effect through feeding control.

4.2 Summary of Results

- The Parenting Feeding Questionnaire, Child Feeding Questionnaire and Child Behavior Checklist have a high reliability coefficient demonstrating excellent internal consistency.

- Instrumental feeding style shows moderate positive relationships with feeding control and psychopathology.

- Control feeding style is highly correlated with encouragement feeding and shows moderate associations with instrumental and emotional feeding as well as feeding control.⁴⁸

- Emotional feeding style is strongly linked with encouragement feeding and moderately linked with instrumental and control feeding. It also has significant, though weaker, associations with feeding control and psychopathology.

- Encouragement feeding style is highly correlated with control feeding and shows weaker correlations with feeding control and psychopathology.

- Regression analysis reveals that demographic variables (age, gender, and family system) explain 11.5% of the variance in psychopathology, but none of these predictors are statistically significant. Parental feeding styles explain an additional 20.5% of the variance in psychopathology. Significant predictors are instrumental feeding and encouragement feeding. Feeding control adds an additional 2.5% to the explained variance in psychopathology but is not a significant predictor ($p = .11$).

- Mediation analysis indicates that feeding control is significantly mediates the relationship between instrumental and encouragement parenting styles and psychopathology in middle aged children with psychopathology.⁴⁹

Chapter V Discussion

Recent research delved into the connection between parenting feeding styles, feeding control behaviors of mothers, and the emergence of psychopathology in middle aged children. This quantitative study aimed to measure the impact of these feeding practices on the mental health outcomes of children as they reach middle age. The findings of this study are pivotal in understanding how early-life parental feeding behaviors can contribute to psychological issues later in life, highlighting the importance of appropriate feeding strategies in childhood development. Parenting feeding styles refer

to the approaches and behaviors parents use to manage their children's eating habits. These styles can significantly impact children's nutritional intake, eating behaviors, and overall health. The four main feeding styles identified in the literature are authoritative, authoritarian, permissive, and neglectful (Blissett, 2011; Hughes et al., 2005; Ventura & Birch, 2008; Hughes et al., 2005; Campbell et al., 2010; Barlow & Durand, 2015). A reliability analysis was conducted to determine whether the scales used in the study were suitable for further use. The reliability of the Parenting Feeding Style Questionnaire (PFSQ) was found to be $\alpha = .92$, indicating strong reliability. The Child Feeding Questionnaire (CFQ) had a Cronbach's alpha value of

$\alpha = 0.89$, which is considered good reliability. Similarly, the Child Behavior Checklist (CBC) demonstrated excellent reliability with a Cronbach's alpha value of $\alpha = .94$. These results confirm that all three scales are reliable and appropriate for use in the study. This study examined the relationships among various parental feeding styles and their impact on child feeding practices and psychopathology. The instrumental feeding style showed a moderate positive relationship with both feeding control and psychopathology. The control feeding style was highly correlated with encouragement feeding and had moderate associations with instrumental and emotional feeding as well as feeding control, but a weaker association with psychopathology. Emotional feeding was strongly linked with encouragement feeding and moderately linked with instrumental and control feeding, with weaker yet significant associations with feeding control and psychopathology. Encouragement feeding, while highly correlated with control feeding and moderate associations with instrumental and emotional feeding styles, weak associations with feeding control and very weak associations with psychopathology. The findings suggest that these feeding styles are interrelated and have a moderate impact on child feeding practices and behavior, with encouragement feeding showing weaker correlations with child outcomes. These findings are aligned with existing literature for example; a study by Blissett et al. (2013) found that instrumental feeding was associated with higher levels of emotional eating in children, which can be a precursor to psychological issues. Birch and Fisher (2000) highlight that controlling feeding practices can disrupt a child's ability to self-regulate food intake, potentially leading to eating disorders rather than more general psychopathological issues. These practices have been linked to emotional eating and subsequent weight problems, as supported by research from Topham et al. (2010), which found that children who are emotionally fed are more likely to eat in the absence of hunger, leading to obesity and related psychological issues. A hierarchical multiple regression analysis was conducted to investigate the predictors of psychopathology, including demographic variables (age, family system, gender) and parental feeding styles

(instrumental, control, emotional, encouragement) and feeding control. Demographic variables were found not to be the significant predictors of psychopathology associated with parental feeding styles and feeding control. Parental feeding styles explain additional variance in psychopathology. Significant predictors are instrumental feeding and encouragement feeding. Feeding control adds an additional variance in psychopathology but is not a significant predictor. Previous research has often found that while demographic factors can influence general developmental outcomes, their direct effect on psychopathology might be overshadowed by more proximal factors like parenting practices. For instance, studies like those by Goodman et al. (2011) indicate that while demographic variables can contribute to a child's psychological development, their impact is often mediated by more immediate environmental factors such as parenting style and family dynamics. Instrumental feeding, where food is used as a tool to control behavior (e.g., as a reward or punishment), has been linked to negative psychological outcomes in children. This is consistent with findings from studies by Rodgers et al. (2013), which show that using food to manage behavior can contribute to emotional eating and related psychopathologies such as anxiety and depression. On the other hand, encouragement feeding, which involves positively promoting healthy eating habits, has been associated with better psychological outcomes. This style fosters a healthier relationship with food and is less likely to lead to disordered eating or related psychopathologies, as suggested by studies like those by Vaughn et al. (2016). The role of feeding control in child development is complex. While high levels of control over a child's eating can lead to resistance, anxiety, and disordered eating behaviors, its direct impact on broader psychopathological outcomes may be more nuanced. As highlighted by Ventura and Birch (2008), while controlling feeding practices can disrupt a child's ability to self-regulate food intake, their influence on general psychopathology might be mediated by other factors, such as the child's temperament or the overall family environment. The mediation analysis results indicate that feeding control plays a significant

mediating role in the relationship between both instrumental and encouragement parenting styles and psychopathology in middle-aged children. This suggests that the way parents manage and control feeding directly influences the psychological outcomes in children, specifically within the context of the parenting styles used. In cultures where food is often used as a reward or a means to control behavior, such as in many collectivist societies where obedience and compliance are highly valued, the negative impact of instrumental feeding may be more pronounced. For instance, research conducted in East

Asian cultures, where instrumental feeding is common, has shown a link between controlling feeding practices and increased emotional and eating disorders in children (Wang et al., 2017). This suggests that the cultural context, where hierarchical family structures and obedience are emphasized, may intensify the adverse effects of

instrumental feeding practices on child psychopathology. However, the mediation analysis shows that when feeding control is high, even encouragement feeding can contribute to psychopathology. This may happen because excessive control, even in the context of encouragement, can undermine a child's autonomy and self-regulation, potentially leading to anxiety and stress. The cultural context significantly shapes how feeding practices are perceived and their impact on child development. In collectivist cultures, where parental authority is emphasized, controlling feeding practices might be more normalized and less likely to be questioned, even when they lead to negative outcomes. Conversely, in individualistic cultures, there is a greater emphasis on fostering independence, and controlling practices might be more likely to be associated with negative psychological outcomes in children (Sleddens et al., 2014). To sum up the findings it highlights the significant role of feeding control in the relationship between parenting styles and child psychopathology. The cultural context plays a crucial role in shaping these relationships. In societies where control and obedience are emphasized, the negative impacts of instrumental and encouragement feeding styles may be heightened. Conversely, in cultures that value autonomy, even well-intentioned encouragement feeding may lead to adverse outcomes if it involves excessive control.

5.1 Conclusion

This study explored the relationships between various parental feeding styles and feeding control behaviors and their impact on psychopathologies in middle-aged children. The findings revealed that different feeding styles are interrelated, with instrumental and control feeding styles showing strong correlations with other styles. Instrumental and emotional feeding styles were moderately linked to child feeding practices and psychopathology while encouragement feeding had weaker associations with child outcomes. Hierarchical multiple regression analysis indicated that demographic variables alone were not significant predictors of psychopathology. However, adding parental feeding styles significantly improved the model, with instrumental and encouragement feeding styles being significant predictors of psychopathology. In the final model, feeding control practices added modestly to the explained variance, highlighting the complex interplay between feeding behaviors and child mental health. Overall, the study underscores the importance of authoritative feeding methods for better mental health outcomes and the potential negative impact of high feeding control practices on children's psychological well-being.

5.2 Implications

- Parenting programs should emphasize authoritative feeding practices to improve mental health outcomes in children.
- Interventions should aim to reduce high levels of feeding control, such as pressure to eat and food restrictions.
- Create guidelines that recommend balanced feeding approaches and discourage overly restrictive feeding methods.
- Include questions about feeding practices in routine health screenings to identify and address potential issues early.
- Further studies should explore the long-term impact of different feeding styles on children's mental health outcomes.

5.3 Limitation

- This study used a cross-sectional design, it only provides a snapshot of the relationships between feeding styles and psychopathology at one point in time, limiting the ability to infer causality or observe changes over time.

- The reliance on self-reported data from parents about feeding styles and child behavior may introduce bias or inaccuracies, as parents might not always accurately recall or report their feeding practices.

- The study may have used a narrow range of measures to assess psychopathology, potentially overlooking other relevant mental health conditions or symptoms.

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- There may be other factors influencing child psychopathology that were not controlled for in the study, such as family dynamics, parental mental health, or socioeconomic status, which could affect the observed relationships.

5.4 Suggestions

- Conduct longitudinal research to track the long-term effects of different feeding styles on children's mental health over time, allowing for better understanding of causality and developmental changes.

- Incorporate objective measures and observational methods to complement self-reported data, reducing potential biases and inaccuracies in assessing feeding practices and child behavior.

- Ensure a diverse sample in terms of demographics, cultural backgrounds, and socio-economic status to enhance the generalizability of the findings across different populations.

- Include a wider range of measures and assessments for psychopathology to capture various mental health conditions and symptoms, providing a more

comprehensive understanding of their relationship with feeding styles.

- Address potential confounding variables such as family dynamics, parental mental health, and socioeconomic status in future studies to better isolate the effects of feeding styles on child psychopathology. 56

References

- Anderson, J. W., Konz, E. C., Frederich, R. C., & Wood, C. L. (2001). Long-term weight-loss maintenance: A meta-analysis of US studies. *The American Journal of Clinical Nutrition*, 74(5), 579-584.
- Berge, J. M., Wall, M., Hsueh, T. F., Fulkerson, J. A., Larson, N., & Neumark-Sztainer, D. (2014). The protective role of family meals for youth obesity: 10-year longitudinal associations. *Journal of Pediatrics*, 166(2), 296-301.
- Birch, L. L., & Fisher, J. O. (2000). Mothers' child-feeding practices influence daughters' eating and weight. *The American Journal of Clinical Nutrition*, 71(5), 1054-1061.
- Birch, L. L., Fisher, J. O., & Davison, K. K. (2001). Learning to overeat: Maternal use of restrictive feeding practices promotes girls' eating in the absence of hunger. *The American Journal of Clinical Nutrition*, 78(2), 215-220.
- Black, M. M., & Aboud, F. E. (2011). Responsive feeding is embedded in a theoretical framework of responsive parenting. *The Journal of Nutrition*, 141(3), 490-494.
- Blissett, J., Meyer, C., & Haycraft, E. (2007). Maternal and paternal controlling feeding practices with male and female children. *Appetite*, 49(1), 252-259.
- Crow, S. J., & Agras, W. S. (1999). Parents' report of the influence of child feeding practices on the child's weight status. *International Journal of Eating Disorders*, 25(1), 10-13.
- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin*, 113(3), 487-496.
- Faith, M. S., Scanlon, K. S., Birch, L. L., Francis, L. A., & Sherry, B. (2004). Parent

- child feeding strategies and their relationships to child eating and weight status. *Obesity Research*, 12(11), 1711-1722.
- Faith, M. S., Berkowitz, R. I., Stallings, V. A., Kerns, J., Storey, M., & Stunkard, A. J. (2012). Parental feeding attitudes and styles and child body mass index: Prospective analysis of a gene-environment interaction. *Pediatrics*, 130(4), e882-e889.
- Farrow, C. V., & Blissett, J. M. (2006). Breast-feeding, maternal feeding practices and mealtime negativity at one year. *Appetite*, 46(1), 49-56.
- Fulkerson, J. A., Larson, N., Horning, M., & Neumark-Sztainer, D. (2015). A review of associations between family or shared meal frequency and dietary and weight outcomes across the lifespan. *Journal of Nutrition Education and Behavior*, 46(1), 2-19.
- Gibson, E. L. (2012). The psychobiology of comfort eating: Implications for new products. In D. J. Mela (Ed.), *Food, diet and obesity* (pp. 288-312). Woodhead Publishing.
- Hughes, S. O., Power, T. G., Orlet Fisher, J., Mueller, S., & Nicklas, T. A. (2005). Revisiting a neglected construct: Parenting styles in a child-feeding context. *Appetite*, 44(1), 83-92.
- Jansen, P. W., Roza, S. J., Jaddoe, V. W., Mackenbach, J. D., Raat, H., Hofman, A., ... & Tiemeier, H. (2012). Children's eating behavior, feeding practices of parents and weight problems in early childhood: Results from the population-based Generation R Study. *International Journal of Behavioral Nutrition and Physical Activity*, 9(1), 130.
- Loth, K. A., MacLehose, R. F., Fulkerson, J. A., Crow, S., & Neumark-Sztainer, D. (2014). Are food restriction and pressure-to-eat parenting practices associated with adolescent disordered eating behaviors? *International Journal of Eating Disorders*, 47(3), 310-314.
- Musulino, C., & Warin, M. (2014). The 'normal' and the 'pathological': Food and diet in the management of body weight. In *Researching fatness* (pp. 66-83). Routledge.
- Patrick, H., & Nicklas, T. A. (2005). A review of family and social determinants of children's eating patterns and diet quality. *Journal of the American College of Nutrition*, 24(2), 83-92.
- Patrick, H., Hennessy, E., McSpadden, K., & Oh, A. (2013). Parenting styles and practices in children's obesogenic behaviors: Scientific gaps and future research directions. *Childhood Obesity*, 9(S1), S73-S86.
- Rollins, B. Y., Loken, E., Savage, J. S., & Birch, L. L. (2014). Effects of restriction on children's intake differ by child temperament, food reinforcement, and parent's chronic use of restriction. *Appetite*, 73, 31-39.
- Rollins, B. Y., Savage, J. S., Fisher, J. O., & Birch, L. L. (2016). Alternatives to restrictive feeding practices to promote self-regulation in childhood: A developmental perspective. *Pediatrics*, 135(2), e293-e302.
- Shloim, N., Edelson, L. R., Martin, N., & Hetherington, M. M. (2015). Parenting styles, feeding styles, feeding practices, and weight status in 4-12-year-old children: A systematic review of the literature. *Frontiers in Psychology*, 6, 1849.
- Ventura, A. K., & Birch, L. L. (2008). Does parenting affect children's eating and weight status? *International Journal of Behavioral Nutrition and Physical Activity*, 5(1), 15.
- Vartanian, L. R., Herman, C. P., & Polivy, J. (2007). Consumption stereotypes and impression management: How you are what you eat. *Appetite*, 48(3), 265-277.