

## Associations between Parenting Style and Parent and Toddler Mealtime Behaviors

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### Abstract

**Background:** By the time a child is 24 mo old, 50% of parents report experiencing picky eating behaviors with their child. These behaviors include consuming an inadequate dietary variety, eating the same foods repeatedly, and an unwillingness to try either new or familiar foods. Previous research has established relations with regard to the impact of parent feeding strategies on child mealtime behaviors and how parent feeding strategies are influenced by parenting style; however, to our knowledge, no studies have investigated whether there is an association between parenting style and perceived child mealtime behaviors specifically related to picky eating.

**Objective:** The purpose of this study was to investigate whether a relation exists between general parenting style and both parent feeding strategies and perceived picky eater and non-picky eater (NPE) behaviors.

**Methods:** Parents of 2- to 5-y-old children ( $n = 525$ ) completed 2 online surveys: 1) the Mealtime Assessment Survey, which measures the frequency of parent and child mealtime behaviors, and 2) the Parenting Styles and Dimensions Questionnaire, which measures authoritative, authoritarian, and permissive parenting styles. Spearman's correlation analysis was conducted to determine the relations between parenting style and mealtime behavior.

**Results:** Positive correlations were found between an authoritative parenting style and NPE behaviors, as well as parent mealtime strategies that promote positive eating habits. Authoritarian and permissive parenting styles were positively correlated with child behaviors associated with picky eating and parent mealtime strategies that can negatively influence child feeding.

**Conclusions:** These findings suggest that a relation exists between general parenting style and both parent and child mealtime behaviors; however, the directionality of the relation remains unknown. The positive correlations seen within the authoritative parenting style with regard to NPE behaviors suggest the use of authoritative feeding methods to overcome feeding difficulties. *Curr Dev Nutr* 2017;1:e000570.

### Introduction

By the time a child is 24 mo old, 50% of parents report experiencing picky eating behaviors with their child (1). These behaviors include consuming an inadequate dietary variety, eating the same foods repeatedly, and an unwillingness to try either new or familiar foods (1–5). In general, the intake of a picky eater (PE) is reportedly lower in the categories of fruit, vegetables, and protein sources than that of a non-picky eater (NPE) (1, 6–8).

Strong dietary preferences exhibited by a PE can lead to struggles between parents and their children during mealtimes as concerned parents look for feeding methods that encourage healthy eating habits (9, 10). Parent strategies that have been successful in improving food acceptance in children include making a wide variety of foods available in the home, continuously exposing the child to new and familiar foods, offering verbal encouragement, and parental modeling of intake (9, 11–14). Mealtime practices such as



**Keywords:** picky eating, toddler feeding, mealtime strategies, feeding practices, parenting style

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Abbreviations used: MAS, Mealtime Assessment Survey; NPE, non-picky eater; PE, picky eater; PSDQ, Parenting Styles and Dimensions Questionnaire.

controlling intake, pressuring consumption, restricting foods, and the use of rewards have the opposite effect by negatively affecting children's eating behavior (15–18). These strategies can lead to decreased food acceptance, and result in children disliking the foods they are pressured to consume (12, 16, 19–21).

Managing the child's rejection of new, as well as familiar, foods generates frustration and concern among parents, which may alter how parents interact with their child during mealtime (7, 22). Overall, this parental feeding style can be considered as a reflection of the general parenting style because there is no definite distinction between the complete family dynamic and what happens at the table (23–25). According to Baumrind (26), there are 3 main styles of parenting measured on the dimensions of demandingness (control) and responsiveness (warmth): authoritative (high control, high warmth), authoritarian (high control, low warmth), and permissive (low demand, high warmth).

With regard to mealtime, parents who are authoritative use encouragement, balance parent control and child autonomy, model healthy food consumption, and provide a wide variety of fruit and vegetables in the home (24, 25, 27, 28). Authoritarian parenting is linked to a variety of negative feeding strategies such as control, pressure to eat, restriction, rewards for eating, and low fruit and vegetable availability (13, 24, 28, 29). In addition, permissive parents are more lenient, provide rewards for eating, and are negatively correlated with modeling food intake (13, 24, 30).

Previous research has established relations with regard to the impact of parent feeding strategies on child mealtime behaviors and how parent feeding strategies are influenced by parenting style; however, to our knowledge, no studies have investigated whether there is an association between parenting style and child mealtime behaviors specifically related to picky eating. Thus, the purpose of this study was to assess whether overall parenting style was associated with how parents perceive PE or NPE behaviors in toddlers. Our objective was to correlate general parenting style with both PE and NPE behaviors, as well as with parent feeding strategies. We hypothesized that the authoritarian and permissive parenting styles would be positively correlated with PE behaviors and negative mealtime strategies and negatively correlated with NPE behaviors and positive mealtime strategies. In addition, we hypothesized that the authoritative style would be positively correlated with NPE behaviors and negatively correlated with negative mealtime strategies.

## Methods

### Participants

This study was approved by the University of Illinois Institutional Review Board. Parents were recruited from a database of eligible participants at the Innovative Consumer Research facility (Grand Rapids, Michigan), all of whom reside in the Grand Rapids, Michigan, region. Participation requirements included having  $\geq 1$  child aged 2–5 y, and only 1 parent/household could complete the questionnaires about the child. Eligible parents within the Innovative Consumer Research database received an e-mail about the study and could choose to participate. Self-reported screening questions

were used to ensure that participants were interested in completing the surveys associated with the study and had  $\geq 1$  child aged 2–5 y. If the family had  $>1$  child aged 2–5 y, parents were instructed to select only one child to focus on while answering the questions.

### Procedure

Parents were provided with a link to the online study and consented to participation online before beginning the 2 survey measures: the Mealtime Assessment Survey (MAS) and the Parenting Styles and Dimensions Questionnaire (PSDQ). The MAS, which was previously created and used by Boquin et al. (6), contains 43 items with regard to toddler mealtime behaviors and 25 items focused on parent mealtime strategies. Items were developed through a series of focus groups and conjoint analyses examining actions displayed by PEs, NPEs, and parents during feedings. As a result of these analyses, 24 of the 43 items are characteristic of PEs, 14 are characteristic of NPEs, and 5 are not associated with either picky or non-picky eating. Parents rated how frequently the behaviors were exhibited by their child or by themselves on a 5-point categorical scale as “Never” (1 point), “Rarely” (2 points), “Sometimes” (3 points), “Often” (4 points), or “Always” (5 points).

The final toddler mealtime behavior question within the MAS, “Is your child a picky eater,” was the determining factor for establishing PE and NPE categorization. Parents were not provided with a definition of what constitutes a “picky eater” and were instead allowed to interpret this question on the basis of their own experiences with their child. Responses came directly from parents as they answered the survey questions, whereas PE status was classified post hoc by researchers. Children whose parents responded “Sometimes,” “Often,” or “Always” were labeled as PEs, whereas children whose parents responded “Never” or “Rarely” were labeled as NPEs. This method of dividing children on the basis of parent perceptions of feeding behaviors has been used previously by Jacobi et al. (5) and Boquin et al. (6).

In addition, parent mealtime strategies on the MAS were categorized as having a positive, negative, or neutral impact on child mealtime behavior according to findings within the literature. On the basis of the results of previous studies, 8 of the 25 MAS strategies were classified as positive, 9 as negative, and 8 as neutral (9, 12, 14, 20, 21, 31–36). The label of “neutral” was due to either a lack of connection between the strategy and a specific mealtime behavior or because the strategy could be construed as either positive or negative, depending on the context in which it is used. For example, the strategy “require your child to try a bite of each food on their plate” could be seen as encouraging the child to at least taste the food item before rejecting it (positive) or it could be construed as forcing the child to eat something they do not want (negative).

General parenting style was assessed via the PSDQ, which was developed to measure Baumrind's original 3 parenting styles: authoritative, authoritarian, and permissive (26, 37, 38). The PSDQ was developed and validated by Robinson et al. (37, 38), which began as a 62-item questionnaire and was later abbreviated to the 32-item version that was used in this study. Results provide a continuous measure of each style within Baumrind's dimensions of demandingness and responsiveness, with no specific classification

scheme for a predominant parenting style. Each item within the PSDQ describes a behavior that parents may exhibit toward their child during daily interactions, and responses were measured on a 5-point frequency scale: “Never” (1 point), “Once in a while” (2 points), “About half of the time” (3 points), “Very often” (4 points), and “Always” (5 points). The internal consistency of the original 32-item PSDQ among parenting style constructs was shown through Cronbach’s  $\alpha$  scores of 0.86 for authoritative, 0.84 for authoritarian, and 0.64 for permissive (38). In our study, Cronbach’s  $\alpha$  scores were 0.83 for authoritative, 0.72 for authoritarian, and 0.64 for permissive. The lower score for the permissive parenting style may be explained by the fewer number of items in the subscale than with the other 2 parenting styles (39). After completion of all questionnaires, parents answered demographic questions focused on sex, ethnicity, marital status, and the number of children in their home.

### Statistical analyses

All of the statistical analyses were performed with the use of the XLSTAT program, version 2012 (Addinsoft USA). Survey options were presented to parents as word scores (Never, Rarely, Sometimes, Often, and Always) and the numeric values of 1–5 were assigned post hoc for analysis. To determine significant correlations between parenting styles and child mealtime behaviors, as well as between parenting styles and parent mealtime strategies, 2-tailed Spearman correlation coefficients were calculated. For all of the analyses, significance was set as  $P < 0.05$ .

## Results

### Survey participants

Of 572 parents who consented to participate, 525 completed both questionnaires and were included in the analysis, whereas 47 were excluded due to incomplete surveys. The majority of parents were female (95%), 383 were between the ages of 26 and 35 y (73%), 497 were married (95%), and 492 were white (94%). Only 72 parents (14%) had only one child, indicating that most parents had >1 child, with 428 (82%) having 2–4 children (**Table 1**). With regard to the question “Is your child a picky eater,” 335 parents (64%) perceived their child as being a PE with the use of the scale of “Sometimes” to “Always,” whereas 190 parents perceived their child as being an NPE (36%).

### Child behaviors

Significant positive correlations were observed between behaviors associated with picky eating in children and both the authoritarian and permissive parenting styles (**Table 2**). Authoritarian parenting was positively correlated with 10 of the 23 behaviors that have been associated with PEs, including cringing ( $r = 0.15, P < 0.01$ ), crying or getting upset ( $r = 0.13, P < 0.01$ ), being suspicious of food ( $r = 0.13, P < 0.01$ ), and showing signs of sadness or disappointment when food is not prepared “right” ( $r = 0.13, P < 0.01$ ) (**Table 2**). In addition, permissive parenting was positively correlated with 19 of the 23 PE behaviors. This included behavioral issues, such as refusing to come to the table ( $r = 0.29, P < 0.001$ ) and refusing to open

**TABLE 1** Demographic profile of parent participants<sup>1</sup>

	n	%
Sex		
Female	500	95.2
Male	12	2.3
Prefer not to say	13	2.5
Age, y		
18–25	25	4.8
26–35	383	72.9
36–45	110	20.9
46–55	3	0.6
Prefer not to say	4	0.8
Marital status		
Single	21	4.0
Married	497	94.7
Prefer not to say	7	1.3
Race/ethnicity		
African American	8	1.5
Asian	2	0.4
White	492	93.7
Hispanic	4	0.8
Prefer not to say	19	3.6
Number of children		
1	72	13.7
2	225	42.9
3	151	28.8
4	52	9.9
5	10	1.9
>5	15	2.8

<sup>1</sup> $n = 525$ .

their mouth ( $r = 0.19, P < 0.001$ ), as well as food-specific problems, such as eating a narrow range of foods ( $r = 0.19, P < 0.001$ ), eating the same foods repeatedly ( $r = 0.24, P < 0.001$ ), and drinking liquids instead of eating at meals ( $r = 0.26, P < 0.001$ ). Both authoritarian and permissive styles were positively correlated with parents perceiving their child as a PE [ $r = 0.10 (P < 0.05)$  and  $r = 0.29 (P < 0.001)$ , respectively] (**Table 2**). The authoritative parenting style was positively correlated with 3 PE behaviors including asking questions about the meal being prepared ( $r = 0.13, P < 0.01$ ), showing signs of sadness when food is not prepared “right” ( $r = 0.10, P < 0.05$ ), and taking a long time to finish a meal ( $r = 0.09, P < 0.05$ ).

Authoritarian and permissive parenting styles were negatively correlated with the NPE behaviors of trying new foods [ $r = -0.10 (P < 0.05)$  and  $r = -0.22 (P < 0.001)$ , respectively] and eating foods that are considered “healthy” [ $r = -0.20 (P < 0.001)$  and  $r = -0.26 (P < 0.001)$ , respectively] (**Table 3**). Permissive parenting was negatively correlated with 12 of the 14 NPE child behaviors, including those related to food presentation, preparation, and sensory attributes, such as consuming lumpy or bitter foods. In contrast, authoritative parenting was the only style that had positive correlations with behaviors associated with NPEs, including looking forward to mealtime ( $r = 0.09, P < 0.05$ ), trying new foods ( $r = 0.09, P < 0.05$ ), eating “healthy” foods ( $r = 0.22, P < 0.001$ ), and eating foods that are normally served raw ( $r = 0.18, P < 0.001$ ).

### Parent strategies

Mealtime strategies that negatively influence child feeding practices are presented in **Table 4**. The authoritarian parenting style was positively correlated with 5 out of 9 negative mealtime strategies,

**TABLE 2** Significant correlation coefficients (*r*) indicating the relations between picky eating behaviors and parenting styles<sup>1</sup>

Child behavior	Parenting style		
	Authoritative	Authoritarian	Permissive
Goes for long periods of time without thinking about eating or saying "I'm hungry"			0.29***
Puts up a fight or refuses to come to the table when it is time for a meal			0.13**
Shows signs of fear, nervousness, or strong anxiety before mealtime		0.09*	
Goes in and out of kitchen and asks questions about the meal being prepared	0.13**		
Cringes or makes a negative face after seeing or eating certain foods		0.15**	0.22***
Cries or gets upset after seeing or eating certain foods		0.13**	0.21***
Gags or has physical reaction after seeing or eating certain foods (not related to food allergies)			
Is disengaged/uninvolved while sitting at the table during mealtime	-0.10*	0.15***	0.18***
Carefully inspects most food before taking a bite (is suspicious of food)		0.13**	0.16***
Has something better to do than eating at mealtime			0.25***
Shows signs of sadness or disappointment when food is not prepared/cooked "right"	0.10*	0.13**	0.15**
Needs to eat with special utensils/dishes			0.10*
Eats foods in sequence during the main course (e.g., all peas first, then all potatoes, etc.)			
Takes a long time to finish a meal compared with the rest of the family	0.09*	0.14**	0.16***
Refuses to open mouth when does not want to eat certain foods			0.19***
Would rather drink liquids instead of eat the food at mealtime		0.11*	0.26***
Needs specific food presentation or preparation		0.10*	0.17***
Eats the same foods repeatedly			0.24***
Eats from a narrow range of foods (<10 different foods)			0.19***
Eats foods from only one food group (e.g., eats only from meat group, grains group, etc.)			0.15**
Eats the same meal for breakfast			
Eats the same meal for lunch			0.12**
Eats the same meal for dinner			0.15**
Is a picky eater		0.10*	0.29***

<sup>1</sup>Correlation values were derived by using Spearman's correlation analysis. \**P* < 0.05, \*\**P* < 0.01, \*\*\**P* < 0.001.

including the use of restriction through withholding favorite foods ( $r = 0.22$ ,  $P < 0.001$ ), pressure to eat by making the child finish their meal ( $r = 0.17$ ,  $P < 0.001$ ), and showing disapproval if the child does not eat ( $r = 0.28$ ,  $P < 0.001$ ). The permissive parenting style was also positively correlated with showing disapproval ( $r = 0.14$ ,  $P < 0.01$ ), as well as offering food or nonfood rewards [ $r = 0.18$  ( $P < 0.001$ ) and  $r = 0.25$  ( $P < 0.001$ ), respectively] and making a different meal for the child if he or she did not like what was served ( $r = 0.27$ ,  $P < 0.001$ ). In contrast, the authoritative parenting style was not significantly correlated with any negative parenting strategies (Table 4).

Positive associations between parenting style and positive parent feeding strategies are shown in Table 5. The authoritative style showed a positive correlation with all 8 positive parent strategies. Items with the strongest correlations ( $P < 0.001$ ) were as follows: making the meal fun ( $r = 0.23$ ), teaching about the food ( $r = 0.34$ ), praising feeding skills ( $r = 0.27$ ), involving the child in food preparation ( $r = 0.38$ ), encouraging new food intake ( $r = 0.31$ ), and parent modeling ( $r = 0.27$ ). Alternatively, the authoritarian style was negatively correlated with 5 of the 8 positive strategies, including making the meal fun ( $r = -0.15$ ,  $P < 0.001$ ) and involving the child in food preparation ( $r = -0.14$ ,  $P < 0.01$ ). Permissive parenting was negatively correlated with teaching about the food ( $r = -0.15$ ,  $P < 0.01$ ) and showed a positive correlation with making the meal into a game ( $r = 0.12$ ,  $P < 0.01$ ) (Table 5).

## Discussion

As researchers continue to dissect the complexities of the picky eating phenomenon, this analysis further elucidates how parenting

style affects behaviors exhibited during toddlers' mealtime. Not only have we shown that parenting style is related to the strategies that parents use to get their children to eat but we have also shown that parenting style is associated with the prevalence of specific behaviors in children who are perceived by their parents as either a PE or an NPE. Results indicate that correlations exist between the 3 main parenting styles and the behaviors of both parents and children during feeding. The positive correlation between authoritarian and permissive parenting styles with both perceived PE behaviors and negative mealtime strategies supported our hypothesis. In addition, positive correlations were observed between the authoritative parenting style and perceived NPE behaviors, as well as with positive mealtime strategies.

This work extends the findings of previous studies that examined specific PE or NPE behaviors by making a preliminary association between pickiness and parenting-style feeding practices. For example, Hughes et al. (25) showed that authoritative parents are highly nurturing compared with authoritarian parents, and Iannotti et al. (27) reported that encouragement, which is often used by authoritative parents, positively influenced children's eating patterns. In addition, Patrick et al. (28) found that authoritative parents were associated with higher consumption of vegetables in preschoolers, which is a food group consumed more by children who are nonpicky (6, 8). Overall, we found that this parenting style was correlated with providing their child some control over the meal, such as having them help plan the meal or allowing them to choose what to eat from the foods served, while maintaining a positive feeding environment by praising the child and making the meal fun. As a result, the authoritative style was not only correlated with beneficial feeding strategies

**TABLE 3** Significant correlation coefficients indicating the relation between non-picky eating behaviors and parenting styles<sup>1</sup>

Child behavior	Parenting style		
	Authoritative	Authoritarian	Permissive
Looks forward to eating and mealtime	0.09*		-0.19***
Finishes all the food served on the plate			-0.25***
Tries new foods	0.09*	-0.10*	-0.22***
Eats foods that are considered "healthy"	0.22***	-0.20***	-0.26***
Eats leftovers			-0.17***
Eats foods with something in them that cannot be seen (e.g., filled foods such as eggrolls)	0.10*		-0.12**
Eats foods that have touched each other on the plate	0.09*		
Eats foods that are mixed or that have complex ingredients (e.g., casseroles, lasagna)			-0.09*
Eats foods with sauces on them (e.g., pasta with tomato sauce, turkey with gravy)	0.09*		-0.13**
Eats uncooked foods that are normally served raw (e.g., raw veggies, fruit)	0.18***		-0.10*
Eats sour foods			-0.17***
Eats bitter foods (even if they are just slightly bitter)			-0.15**
Eats foods that are "lumpy" (e.g., sauce with pieces in it or stew)	0.11*		-0.16***
Eats foods that are slippery or "slimy" (e.g., fried egg, gelatin dessert)			-0.16***

<sup>1</sup>Correlation values were derived by using Spearman's correlation analysis. \* $P < 0.05$ , \*\* $P < 0.01$ , \*\*\* $P < 0.001$ .

but also with NPE behaviors. Although authoritative parenting was also positively correlated with 3 PE behaviors, these were not behaviors that indicate an unwillingness to eat on the part of the child.

In the case of the authoritarian and permissive styles, there were positive correlations with feeding strategies that were previously shown to negatively influence child behavior, such as control, restriction, pressure, and rewards (19–21, 27). These findings support the previous work of Hubbs-Tait et al. (24), who found that authoritarian parents used restriction, whereas permissive parents provided rewards. Both styles were also positively correlated with behaviors exhibited by PEs; however, this does not indicate that the impact of authoritarian and permissive parenting styles is the same. The demandingness of the authoritarian style was shown through correlations with negative mealtime strategies such as pressure and restriction, whereas the leniency of permissive parenting was seen through correlations with the use of rewards and making a different meal when the food is not liked. Ultimately, both approaches to mealtime can discourage NPE behaviors.

One of the limitations of the current study was the low correlation coefficients observed between aspects of picky eating and

parenting style, although the associations were significant. The low correlation coefficients may indicate that the relation between parenting style and child behavior is nonlinear or that there is more variability within the data, which is plausible due to the large sample size in the study (40).

Another limitation was the use of self-reporting by survey takers, because they confirmed their eligibility to participate and were entrusted to report accurate responses about both their own and their child's behaviors. Although screening questions disqualified ineligible participants, the at-home survey administration limited researchers' control over testing conditions. To mitigate this limitation, a large sample size was recruited to ensure that results were representative of the local population. Furthermore, due to self-reporting, results were based on each participant's recollection of their own child's behaviors. As a result, researchers could not draw any conclusions about actual child behaviors, but instead analyzed the correlation between known PE or NPE behaviors and the prevalence of various parenting behaviors.

In addition, it should be noted that the PSDQ was used to measure overall parenting style as a scale score of each dimension.

**TABLE 4** Significant correlation coefficients indicating the relation between negative mealtime strategies and parenting styles<sup>1</sup>

Mealtime strategy	Parenting style		
	Authoritative	Authoritarian	Permissive
Offer your child a favorite food, snack, or sweet/dessert as a reward for eating			0.18***
Offer your child a nonfood reward for eating food served at a meal (e.g., "If you eat your chicken and you can watch television after dinner")			0.25***
Show disapproval if your child does not eat		0.28***	0.14**
Tell your child he or she cannot leave the table until a food is eaten (e.g., "You must eat a bite of green beans before being excused")		0.15***	
Withhold a favorite food, snack, or sweet/dessert as a consequence for not eating		0.22***	
Withhold something other than food as a consequence for not eating (e.g., "If you don't eat your casserole, you can't go outside after dinner")		0.23***	0.20***
Make your child finish all of the meal before getting dessert		0.17***	
Make a different food for your child before the meal if he or she doesn't like what is being served (e.g., the family is eating casserole and the child eats macaroni and cheese)			0.27***
Make a different food for your child after the meal if he or she didn't eat the food that was served			0.24***

<sup>1</sup>Correlation values were derived by using Spearman's correlation analysis. \*\* $P < 0.01$ , \*\*\* $P < 0.001$ .

**TABLE 5** Significant correlation coefficients indicating the relation between positive mealtime strategies and parenting styles<sup>1</sup>

Mealtime strategy	Parenting style		
	Authoritative	Authoritarian	Permissive
Arrange the food in an interesting way to make the meal fun (e.g., making the food on the plate look like a smiley face)	0.23***	−0.15***	
Teach your child about the food served at the meal	0.34***	−0.13**	−0.15**
Allow your child to choose the foods he or she wants to eat from the food that is served	0.11**		
Praise your child about his or her food intake or feeding skills	0.27***	−0.09*	
Involve your child in planning and preparing the meal	0.38***	−0.14**	
Encourage your child to try new foods	0.31***	−0.12**	
Make the meal into a game to encourage eating	0.12**		0.12**
Model to your child that Mom and Dad are eating the food so they should eat the food too	0.27***		

<sup>1</sup>Correlation values were derived by using Spearman's correlation analysis. \* $P < 0.05$ , \*\* $P < 0.01$ , \*\*\* $P < 0.001$ .

Variations exist in how parents approach different situations and interact with their child, creating contextual fluidity within parenting styles (41). Therefore, parents were not classified into one specific style; instead, the factors that comprise each dimension were correlated with the prevalence of PE and NPE mealtime behaviors in an effort to understand the connection between authoritative, authoritarian, and permissive strategies and child feeding habits. Although our findings showed significant associations between parenting styles and mealtime behaviors, the results were interpreted in relation to the typical characteristics of each style.

It is important to consider that although a relation exists between parenting style and child behaviors, the directionality of the relation remains unknown. Picky eating is a common occurrence in toddlers; however, it cannot be ascertained whether parenting style leads to a power struggle, creating difficult child behaviors, or whether the child's mealtime conduct causes frustration and the use of negative strategies by the parents. Studies often focus solely on the impact parents have on their children and ignore the potential reverse causality that children may have on their parents' attitudes and behaviors (42, 43). The current study establishes the relation between parenting style and mealtime behaviors in parents and their children. More observational and longitudinal studies are needed to further define the roles that the parent and child play in the dynamic of picky eating. In addition, although this study is focused on PE and NPE behaviors, there are additional difficulties exhibited during mealtimes, such as food neophobia, sensory integration challenges, oral motor development, and overall child temperament, which can affect how children eat. Research is needed to delineate the differences in PE and NPE behaviors compared with other problems parents experience with their children.

In conclusion, the relation found between general parenting style and both parent and perceived child mealtime behaviors indicates that parenting methods could possibly exacerbate feeding problems. If practices commonly associated with the authoritarian and permissive styles such as restriction, reward and disapproval are used, children's food acceptance can change and parents may notice a higher prevalence of PE behaviors. Yet, if authoritative practices such as praise, modeling, and child involvement are used, children may overcome any natural tendencies toward picky behaviors. Ultimately, learning to use more authoritative style

methods could support parents in their effort to minimize picky eating difficulties with their children.

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