

Parenting Styles and Parenting Practices in Pediatric Diabetes

The influence of parents on both the adherence behavior and the glyce-mic control of their children and adolescents with diabetes has been docu-mented for several decades. In their article, Shorer et al. (1) focus on the di-mension of parental influence that has been defined as “parenting style.” They add to the small but growing literature examining the influence of fathers on out-comes in adolescents with a chronic illness (2,3). Scientists in the child devel-opment field have emphasized the impor-tance of distinguishing parenting styles from “parenting practices” (4). Parenting styles are defined as characteristics of the parent that are stable over time and con-stitute the emotional context for specific parenting practices (5). Parenting styles are usually discussed as typologies charac-terized by the parent’s level of sensitivity to and expectations for their child’s behavior (6). Parenting styles are usually defined ac-cording to the intersection of these two di-mensions, as illustrated in Table 1.

Parenting practices, on the other hand, are the specific behaviors that parents use to socialize their children. In reality, parenting involves both parenting styles (the stable “emotional climate”) and specific parenting practices (concrete be-haviors). Shorer et al. studied Israeli ado-lescents with type 1 diabetes aged 11–18 years and their mothers and fathers in a cross-sectional study and reported that an “authoritative” parenting style of fathers was related to better glycemic control and adherence in the adolescent, whereas a “permissive” parenting style of mothers was related to worse glycemic control and lower adherence to treatment in adoles-cents (1). Adherence was assessed by both adolescent and parent self-report; how-ever, it is not clear which respondent’s data—youth’s, mothers’, fathers’, or pos-sibly a combination—were assessed for the results reported.

In an earlier study of younger chil-dren with type 1 diabetes who were 4–10 years old, Davis et al. (7) also reported that an authoritative parenting style was related to better adherence to treatment as well as better glycemic control. Davis et al. studied a multiethnic sample of families

and reported that parenting style varied by ethnicity and socioeconomic status. These authors pointed out that ethnicity was confounded with socioeconomic sta-tus, and they speculated that identifying the most beneficial parenting style for youngsters with diabetes may be some-what specific to the family’s demographic and cultural characteristics. This research by Davis et al. (7) calls for understanding parenting styles of parents with youngsters with diabetes in the context of the other stressors with which parents are coping.

In the general child development literature, authoritative parenting styles are most often associated with the highest achievement levels in youth and the most positive health outcomes, whereas the authoritarian parenting style is most often associated with poorer academic and health outcomes in children (4). Addi-tionally several studies have reported that while Caucasian parents most fre-quently have authoritative parenting styles, black parents have more authori-tarian parenting styles and Hispanic parents are characterized by more permis-sive parenting styles. Reviews that have compared parenting styles research across different cultural and ethnic groups have reported that the authoritative parenting style has not been shown to be associated with optimal child outcomes in families of ethnic minority origin; likewise, an authori-tarian parenting style has not consistently related to poor outcomes in minority fam-ilies (4).

With the dramatic rise in serious childhood overweight and obesity in the U.S., parenting styles and parenting prac-tices have been increasingly documented as risk factors for children’s overweight and obesity (8). This increase in child-hood overweight has triggered the in-crease of metabolic syndrome and type 2 diabetes in adolescents, forecasting a sig-nificant public health problem (9). Recent research has shown that several specific parenting practices around feeding are associated with an increased risk of over-eating and therefore overweight and obesity. These high-risk specific feeding behaviors or parenting practices include urging children with “clean your plate” and thus

ignore satiety cues, restricting the type and amount of food a child can eat, and using food as a reward (10–12). In addition, a large national representative sample of fam-ilies followed longitudinally over the pre-school to school-age years documented that parenting styles (feeding styles) were associated with the risk of overweight among children. Authoritative parents (high levels of maternal sensitivity and high expectations for child self-control) had the lowest prevalence of overweight children; authoritarian parents (low sensi-tivity and high expectations for child self-control) had the greatest odds of child overweight; and children of permissive and “neglectful” mothers were twice as likely to be overweight compared with children of authoritative mothers (13). Taken as a whole, these studies suggest that by grade school, parenting styles (feeding style) are strongly linked to overweight in school-age children, thus laying a foundation for these youth to enter adolescence on a trajectory of risk for life-long obesity and risk of type 2 diabetes.

Laurence Steinberg, PhD, the leading expert in the field of parenting styles research, has stated that the benefits of an authoritative parenting style “transcend the boundaries of ethnicity, socioeconomic status, and household composition” (14). After careful review of many cross-cultural studies of parenting styles, Steinberg con-cluded that even though authoritative parenting is more prevalent in European-American parents than in ethnic minority parents, it provides benefits for all youth by promoting positive psychosocial and healthy development (14).

Shorer et al. (1) provided the first em-pirical report of the association between the authoritative parenting style of fathers and optimal glycemic and adherence out-comes in adolescents with type 1 diabetes. It is important for researchers and clini-cians working with youth with diabetes to attend to the conclusions of the esteemed child/adolescent theorist and researcher Laurence Steinberg (14,15) and understand that the foundations of an authoritative parenting style will help to foster positive health outcomes in all adolescents with

Table 1—Typology of parenting styles

	High expectations for child's behavior (for child self-control)	Low expectations for child's behavior (for child self-control)
High sensitivity (warmth) toward child	Authoritative style	Permissive style
Low sensitivity (warmth) toward child	Authoritarian style	Neglectful style

Adapted from Rhee et al. (13).

diabetes or at-risk for diabetes. These foundations include 1) having high expectations for the teen's cooperation with and adherence to the diabetes regimen or a healthy meal plan, and 2) delivering these expectations within a context of warmth, sensitivity, and lack of criticism.

In summary, think of parenting style as a moderator of diabetes management parenting practices (or feeding parenting practices) and adolescent outcomes such as adherence and glycemic control (or weight). Parents who are involved in their teen's blood glucose monitoring (or food choices) within an authoritative parenting style (high levels of expectation for adherence and high levels of warmth and sensitivity) will likely facilitate their teen's checking blood glucose levels more frequently (or making more healthy food choices). In contrast, parents who are involved in their teen's blood glucose monitoring (or food choices) within the context of an authoritarian parenting style (high levels of expectation for adherence and low levels of sensitivity and warmth) will likely inhibit their teen's adherence to blood glucose monitoring or healthy food choices. This implies that for optimal family management of type 1 and type 2 diabetes, as well as for prevention of overweight and type 2 diabetes in youth, clinicians must be trained to assist parents of all cultural backgrounds to strive for an authoritative parenting style with respect

to management of diabetes and feeding, while remaining sensitive to other stressors impacting the parents and family.

BARBARA J. ANDERSON, PHD

From the Department of Pediatrics, Baylor College of Medicine, Houston, Texas.

Corresponding author: Barbara J. Anderson, bjanders@texaschildrens.org.

DOI: 10.2337/dc11-1028

© 2011 by the American Diabetes Association. Readers may use this article as long as the work is properly cited, the use is educational and not for profit, and the work is not altered. See <http://creativecommons.org/licenses/by-nc-nd/3.0/> for details.

Acknowledgments—No potential conflicts of interest relevant to this article were reported.

References

1. Shorer M, David R, Schoenberg-Taz M, Levavi-Lavi I, Phillip M, Meyerovitch J. Role of parenting style in achieving metabolic control in adolescents with type 1 diabetes. *Diabetes Care* 2011;34:1735–1737
2. Dashiff C, Morrison S, Rowe JK. Fathers of children and adolescents with diabetes: what do we know? *J Pediatr Nurs* 2008; 23:101–119
3. Wysocki T, Gavin L. Paternal involvement in the management of pediatric chronic diseases: associations with adherence, quality of life, and health status. *J Pediatr Psychol* 2006;31:501–511

4. Spera C. A review of the relationship among parenting practices, parenting styles, and adolescent school achievement. *Educ Psychol Rev* 2005;17:125–146
5. Darling N, Steinberg L. Parenting style as context: an integrative model. *Psychol Bull* 1993;113:487–496
6. Baumrind D. Current patterns of parental authority. *Dev Psychol* 1971;4:1–103
7. Davis CL, Delamater AM, Shaw KHG, et al. Parenting styles, regimen adherence, and glycemic control in 4- to 10-year-old children with diabetes. *J Pediatr Psychol* 2001;26:123–129
8. O'Connor TM, Hughes SO, Watson KB, et al. Parenting practices are associated with fruit and vegetable consumption in pre-school children. *Public Health Nutr* 2010;13:91–101
9. Nadeau K, Dabelea D. Epidemiology of type 2 diabetes in children and adolescents. In *Epidemiology of Pediatric and Adolescent Diabetes*. Dabelea D, Klingensmith GJ, Eds. New York, Informa Health Care, 2008, p. 103–123
10. Birch L, McPhee L, Shoba B, Steinberg L, Krehbiel R. "Clean up your plate": effects of child feeding practices on the conditioning of meal size. *Learn Motiv* 1987; 18:301–317
11. Birch LL, Fisher JO. Development of eating behaviors among children and adolescents. *Pediatrics* 1998;101:539–549
12. Birch L, Zimmerman S, Hind H. The influences of social-affective context on the formation of children's food preferences. *Child Dev* 1980;51:856–861
13. Rhee KE, Lumeng JC, Appugliese DP, Kaciroti N, Bradley RH. Parenting styles and overweight status in first grade. *Pediatrics* 2006;117:2047–2054
14. Steinberg L. Presidential address. We know some things: parent-adolescent relationships in retrospect and prospect. *J Res Adolesc* 2001;11:1–19
15. Steinberg L, Dornbusch SM, Brown BB. Ethnic differences in adolescent achievement. An ecological perspective. *Am Psychol* 1992;47:723–729