

## **Family Processes and the Competence of Adolescents and Primary School Children**

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*Associations were examined between 12 measures of family process and 6 measures of personal and social competence for 102 adolescents aged 15–16 and 99 children aged 8–9. Canonical correlations analysis revealed that general competence among primary school children was associated with high levels of support from parents, a high allocation of household responsibility, a high level of parental control, and a low level of parental punishment. Among adolescents, general competence was associated with a high level of support from parents, a low level of parental control, a high allocation of household responsibility, parental use of induction, a low level of parental punishment, high-quality sibling relationships, and high family cohesion. The findings suggest that as children enter adolescence, general competence becomes more closely bound up with the quality of sibling relations and the degree of parental control, and less closely bound up with support from parents.*

### **INTRODUCTION**

Family processes—defined here as ongoing patterns of behavior, feelings, and expectations between family members—can serve as resources for

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the development of children (Amato and Ochiltree, 1986b; Ochiltree and Amato, 1984). Generally speaking, positive interpersonal processes within families, such as mutual support and cohesion, provide opportunities for the development of mastery and competence. On the other hand, negative interpersonal processes, such as indifference and conflict, provide few opportunities for development. Consistent with a resources perspective, research shows that positive family processes, and the absence of negative family processes, are associated with high levels of social and personal competence among children (Maccoby and Martin, 1983; Rollins and Thomas, 1979).

Although less well documented, studies also indicate that family processes continue to be related to the development of adolescents (e.g., Bell and Bell, 1982; Bell *et al.*, 1985; Gecas and Schwalbe, 1986). However, it is not clear from existing research whether the family processes that predict competence in adolescents also predict competence in younger children, or whether the critical family processes differ for children in the two age groups. Indeed, a focus on developmental issues suggests that the optimal family environment for adolescents, with their growing needs for independence and self-definition, might be rather different from that of primary school children.

The present study addresses this issue by comparing children in two age groups—adolescence and middle childhood—on the family processes associated with personal and social competence. Previous research and theory suggest a number of dimensions of family life that might usefully be included in such an analysis. Each of these dimensions is discussed below.

### **Parental Support**

Support has been identified as a major dimension of parent-child relations, with supportive parents taking an interest in their children's activities, showing affection, and providing help with everyday problems. A high level of support from parents has been shown to be associated with socially valued characteristics of young children, including high self-esteem, cognitive development, academic success, and general psychological adjustment (Maccoby and Martin, 1983; Rollins and Thomas, 1979).

Is parental support also an important resource for adolescents? Although it is widely held that parent-child relations deteriorate during the teenage years, research provides a different picture: Most adolescents think highly of their parents, value their parents' opinions, and go to their parents for advice and assistance with personal problems (Amato, 1985b; Kandel and Lesser, 1972; Rutter, 1979). Of course, adolescents, compared with primary school children, have more sources of support outside the family, and for this reason may be relatively less dependent on parents. But given the continuing importance of parents in the lives of most children, it seems

likely that levels of parental support are bound up with the developing competence of adolescents as well as younger children.

### Parental Control

Control is reflected in the number of decisions parents make, the amount of supervision they exercise, and the number of rules they hold for their children. A good deal of control, particularly when combined with high parental support, has been shown to be associated with high self-esteem (Coopersmith, 1967) and instrumental competence (Baumrind, 1969, 1971) in children. Coopersmith (1967) argued that the consistent enforcement of clear rules allows children to internalize a definite set of standards that facilitate the self-regulation of behavior, and hence, the development of competence.

The implications of parental control are rather different for adolescents than for primary school children. Studies based on self-report (Kandel and Lesser, 1972; Poole and Gelder, 1984) and laboratory observation (Jacobs, 1974; Steinberg, 1981) indicate that as children grow older, parents make fewer decisions, enforce fewer rules, and allow their children to exercise greater influence on the family. Contrary to popular opinion, the increased assertiveness of adolescents is not bought at the price of parent-child conflict and a loss of parental influence. Instead, Kandel and Lesser (1972) found that adolescents who were satisfied with the amount of freedom they had tended to have positive feelings toward their parents, did things frequently with their parents, and often went to their parents for advice. Baumrind (1968) argued that when parents enforce rules flexibly, rationally, and in a manner that does not unnecessarily restrict adolescent autonomy, adolescents accept parental authority; it is only when rules are enforced in a rigid, authoritarian manner that adolescents react with rebelliousness. These considerations indicate that adolescent independence is maximized when parents allow a gradual reduction in control, but maintain close relationships and continue to exert a degree of guidance. As Hill and Holmbeck (1986) noted, a view of adolescent autonomy as self-regulation, rather than freedom from parental influence, is more in accord with the research evidence.

Whereas firm parental control may be interpreted by young children as a sign of concern, the same degree of external control may be interpreted by adolescents as overprotectiveness and restrictiveness. Given the adolescent's need for self-regulation, it is not surprising to find that parental overprotectiveness—and a corresponding reluctance to encourage a degree of autonomy—has been found to be associated with a number of negative psychological outcomes among adolescents, such as low self-esteem (Amoroso and Ware, 1986; Westley and Epstein, 1969) and poor ego development

(Hauser *et al.*, 1984). All in all, these considerations suggest that a high level of parental control is associated with a high level of competence among primary school children and a low level of competence among adolescents.

### **Coercive Discipline vs. Induction**

Coercive discipline involves the use of force by parents, and takes the form of physical punishment and deprivation of privileges. In contrast, induction—which involves the use of explanations and reasons—is used by parents to obtain voluntary compliance from children. Rollins and Thomas (1979) concluded that parents' use of coercion is related to negative outcomes for children (such as low levels of cognitive development, moral development, self-esteem, and social competence), whereas parents' use of induction is related to positive outcomes. The consistency of research findings in this area suggest that the negative effects of coercion and the positive effects of induction hold for both younger children and adolescents. However, given the adolescent's increasing level of cognitive sophistication, forms of control based on reason and explanations would appear particularly appropriate, and forms of control based on the use of force would appear particularly inappropriate. It seems probable, therefore, that the negative effects of coercion and the positive effects of induction become increasingly pronounced as children mature.

### **Responsibility Allocation**

The allocation of responsibility to children reflects parental expectations and demands for maturity. It seems likely that giving responsibility to children conveys a sense that they are important members of the household. As such, it is likely to result in feelings of self-worth and self-perceptions of competence. Consistent with this notion, Baumrind (1969, 1971) found that children who were high in competence tended to have parents who made a good number of maturity demands. Baumrind (1968) also argued that having regular household responsibilities is a positive factor in adolescent development as well. For adolescents, in particular, the accepting of greater household responsibilities may occur in exchange for greater autonomy in other areas. Responsibility allocation, therefore, would appear to be linked to children's developing competence, regardless of age level.

### **Sibling Relationships**

Siblings serve as major resources for children in several ways: by acting as caretakers for younger children, by providing companionship and emo-

tional support, and by offering direct instruction (Bank and Kahn, 1982; Cicirelli, 1982; Dunn, 1984). Consistent with this notion, good relationships with siblings have been found to be related to positive social and personal functioning among adolescents (Bell *et al.*, 1985) and primary school children (Bryant, 1982). Given that younger children spend more time in the home and have fewer sources of support elsewhere than do adolescents, siblings may be somewhat more important for primary school children than for adolescents. On the other hand, adolescents are more peer oriented than are younger children, and relations with similarly aged siblings may take on a special significance when children reach the teenage years. Overall, it is not clear from existing research whether positive relations with siblings constitute a greater resource for adolescents or for younger children.

### **Marital Conflict**

A good relationship between parents is reflected in a generally warm and supportive family climate for children. An unhappy marriage, in contrast, may lead to problems in other family relationships and is likely to result in a generally unsatisfactory family climate. Overt conflict between parents, in particular, has been found to be associated with behavior problems and emotional maladjustment in young children (Amato, 1986; Emery, 1982; Ochiltree and Amato, 1983). Effects of marital conflict on adolescents, however, may be less pronounced for several reasons: Compared with primary school children, adolescents have more sources of support outside the family, find it easier to be physically absent from the home, and have greater cognitive ability to rationally understand and cope with conflict (Emery, 1982; Wallerstein and Kelly, 1980).

### **Family Cohesion**

Olson and McCubbin (1983) argued that cohesion is a significant dimension of family life in that it unifies a large number of concepts: emotional closeness, frequency of interaction, preferences for within-group activities, mutual support, shared interests, common goals, and general interdependence. Bell and Bell (1982) found that well-functioning adolescents were more likely than poorly functioning adolescents to describe their families as cohesive. Low levels of family cohesion have also been found to be associated with behavior problems in primary school children such as aggression and speech deficits (Moos and Moos, 1981). Although adolescents are more independent than primary school children, the general reliance of children in both age groups on the family for support, companionship, and guidance suggests that family cohesion is a positive factor in children's development, regardless of age level.

In summary, existing research suggests both similarities and differences in the family characteristics associated with the optimal development of general competence in primary school children and adolescents. The present study examines associations between measures of family processes and measures of personal and social competence *separately* for children in the two age groups. The major hypothesis is that the overall pattern of correlations between interpersonal family processes and forms of competence is different for primary school children and adolescents. Although a large number of hypotheses could be framed dealing with the linkages between specific family processes and specific forms of competence within each age group, these issues are of secondary importance in the present study. Accordingly, the treatment of results and the discussion below emphasize the differences *between* age groups rather than the correlations *within* age groups.

## METHOD

### Sample

The analysis was based on data from the Children in Families Study, conducted by the Australian Institute of Family Studies in 1982–1983. In the first phase of sampling, 113 primary and secondary schools were randomly selected from the state of Victoria, with proportional representation of all school systems and geographical areas. From these schools, children in grades three, four, ten, and eleven were randomly selected. Parents of selected students were contacted by letter and telephone, and their participation was requested. A final sample of 402 families was achieved. Population-sample comparisons indicated that the sample was broadly representative of Victorian families with school-aged children, although the sample underrepresented families with parents born in non-English speaking countries. (For further details on this sample, see Amato, 1985a.) Interviews were conducted privately with each child and one parent (usually the mother) from each family. Interviews with parents were conducted in the home and interviews with children were conducted in the school.

### Family Process Measures

Items from the child's interview schedule were combined to produce 12 measures of family process. All process measures were based on children's reports because it was assumed that children's perceptions, rather than those of parents or outsiders, are the best indicators of their everyday family

experiences. (These measures are also described in Amato, 1987a, in 1987b.)

Measures of *Mother Support* and *Father Support* were constructed from 12 interview items for mothers and 12 corresponding items for fathers. Sample items were "Is your mother (father) interested in the things you do?" and "Does your mother (father) ever help you with personal problems?" (1, *not much*; 2, *sometimes*; 3, *a lot*). For each parent, total scores were computed by adding the ratings for all items. (See Table I for details.)

Three measures of control were constructed from responses to five questions: "In your family, who mostly decides about (1) what jobs you do and when they should be done? (2) your bedtime? (3) programs you watch on television? (4) if you can go out? and (5) which new clothes to buy?" The five decision-making items were added separately for each parent, yielding scores that ranged from 0 (*no decisions usually made by parent*) to 5 (*all decisions usually made by parent*). These scores are referred to as *Mother Control* and *Father Control*. In addition, a measure of *Child Autonomy* was created by adding the items to reflect the number of decisions made by children.

Measures of *Mother Punishment* and *Father Punishment* were based on five pairs of items: "If you are naughty (disobedient) does your mother (father) (1) send you to your room? (2) stop you from seeing your friends? (3) hit you? (4) yell at you? (5) stop you from watching television?" Items

**Table I.** Summary of Family Process and Child Competence Measures

	Source	N items	Reliability
Family process measures			
Mother support	Child	12	.65
Father support	Child	12	.74
Mother control	Child	5	.55
Father control	Child	5	.64
Child autonomy	Child	5	.61
Mother punishment	Child	5	.59
Father punishment	Child	5	.70
Use of induction	Child	1	
Household responsibility	Child	20	.71
Sibling relations	Child	2	.89
Marital conflict	Child	2	.64
Family cohesion	Child	8	.66
Child competence measures			
Cloze reading ability	Child	50	.96
Practical life skills	Parent	20	.83
Self-esteem	Child	80	.91
Social competence	Parent	22	.75
Self-control	Parent	22	.74
Independence	Child	9	.64

were scored dichotomously (0, *parent does not*; 1, *parent does*) and were summed separately for each parent, yielding scores ranging from 0 to 5. Children were also asked if their parents ever react in other ways to disobedience. Responses such as “discuss it” or “explain things to me” were counted as instances of *Induction*.

To create a measure of *Household Responsibility*, children were presented with a list of household chores and asked to indicate which ones they had regular responsibility for completing. Examples of chores included making the bed, keeping the room clean, setting the table, and taking out the garbage. A single score was calculated by adding the number of jobs reported.

To measure the quality of *Sibling Relations*, children were asked how well they “got along” with each of their brothers and sisters. Children’s comments were coded into four ordered categories: (4) *get along well all the time*, (3) *get along well most of the time*, (2) *sometimes get along well and sometimes fight*, and (1) *don’t get along very well*. To create a single score for each child, the mean rating across all siblings was calculated. Children were also asked “Overall, how well do you get on with your brothers and sisters?” and responses were coded into the same categories. Responses to the two items were summed to produce a general measure of sibling relations.

Perceived *Marital Conflict* was measured with two questions: “How well do you think your parents get on with each other?” (1, *very well*; 4, *not very well*) and “How often do your parents get angry with one another or disagree?” (1, *never*; 4, *all the time*). Responses to the two questions were summed.

A measure of *Family Cohesion* was constructed from responses to eight questions dealing with the frequency of joint family activities and children’s feelings of closeness to their families. Sample items included “How often do you go on family outings together?” and “Are there times when it feels really good to be together as a family?” (1, *never*; 2, *sometimes*; 3, *often*).

### Child Competence Measures

Henderson (1981), Marjoribanks (1979), and Edgar (1974) have suggested that researchers pay greater attention to family characteristics that affect forms of child competence *other than* academic ability. Accordingly, six diverse measures of personal and social competence were included in the present study.

*Reading Ability* was included because it is highly correlated with general academic success. A Cloze reading test—in which children are required to fill in blank spaces in a passage so that a story makes sense—was administered to students in their classrooms.

Life skills can be defined as the practical abilities that are necessary to meet day-to-day needs. A measure of *Practical Life Skills* developed by



Amato and Ochiltree (1986a) was used. This measure was based on 20 skills, such as using a washing machine, making a simple meal, mowing a lawn, and traveling by public transportation. Parents indicated how often their children performed each skill (1, *never*; 5, *often*) and a total score was computed by adding the ratings for all items.

The Piers-Harris Children's Self-Concept Scale was selected, as its use was appropriate for the two age groups of children in the study (Piers and Harris, 1969). The total scale score was used as a measure of *Self-Esteem*, with high scores indicating a positive self-concept.

Two measures were constructed from parents' ratings of their children on 22 personality and behavioral characteristics designed to reflect aspects of social competence and adjustment. The ratings were intercorrelated and the first two principal components were extracted. The first principal component, which accounted for 19.6% of the total variance, formed a measure of *Social Competence*. High-loading items on this component included "friendly" (.77), "confident with adults" (.64), "confident at school" (.59), and "very outgoing" (.55).

The second principal component accounted for 10.7% of the total variance. High-loading items included "restless, can't sit still" (-.66), "can't concentrate or pay attention for long" (-.60), "cries a lot or has tantrums" (-.60), "fights a lot, bullies other children" (-.58), and "easily confused" (-.57). This measure is referred to as *Self-Control*.

Finally, *Independence* was measured with nine questions from the child's interview schedule dealing with activities outside the family. These questions included references to (1) whether or not the child had a part-time job, (2) how often the child spent the night at a friend's house, (3) whether or not the child had ever been on a holiday with friends without his or her family, and (4) whether or not the child belonged to any clubs. The independence measure was based on the first component to emerge from a principal components analysis of the nine items.

The family process and child competence measures are summarized in Table I. The reliabilities refer to alpha, KR-20, or theta coefficients, depending on whether the scales were summed Likert ratings, summed dichotomies, or principal component scores, respectively. Some scale items were based on ratings applied to open-ended interview responses; in these cases, coders were trained until agreements reached a minimum of 80%.

## RESULTS

The first step in the analysis involved a test of the hypothesis that family processes are related differently to forms of competence among adolescents and primary school children. A multivariate test was carried out using the 12 family process variables and child age level as independent variables,

and the six forms of competence as dependent variables. The analysis was limited to the 102 adolescents and 99 primary school children from intact two-parent families for whom complete data were available. This analysis, using the multivariate analysis of variance program from SPSSX, revealed that the combined interaction term between family process measures and age level was significant ( $p = .014$ ), indicating that the pattern of relations between processes and forms of competence was *different* in the two age groups.

To determine the nature of this difference, canonical correlations were carried out separately for children in the two age groups. Canonical correlation is a multivariate technique that allows one set of variables to be simultaneously related to a second set of variables. Variables within each set are combined in a linear fashion to produce a composite variable referred to as a canonical variate. These composite variates—one for each set—are derived with the object of maximizing the degree of correlation between them. Once formed, the canonical variates can then be interpreted by examining their correlations with the original variables. After constructing the first pair of variates, successive pairs are created, subject to the restriction that they be uncorrelated with previous canonical variates (Levine, 1978).

The analysis for primary school children revealed an initial canonical correlation of .63 ( $p < .001$ ) and a second canonical correlation of .57 ( $p < .01$ ). This indicated that perceived family processes were significantly and moderately strongly related to forms of children's competence, and that two dimensions were needed to adequately represent the pattern of relations. Table II reveals the correlations of family process and competence variables with the first canonical variate. These correlations can be interpreted in the following manner: Children who were high in self-control, self-esteem, life skills, and social competence tended to describe their families in a particular way, that is, they reported high maternal support, high paternal support, high allocation of household responsibility, high maternal control, low child autonomy, low maternal punishment, and low paternal punishment. The interpretation of this pattern seems straightforward: Parents who are warm and supportive, somewhat controlling, make a good number of maturity demands, and refrain from coercive punishment tend to have children who are generally competent.

The second canonical variate (not presented in Table II) was based on only two items: a high negative correlation between marital conflict and child self-esteem. However, zero-order correlations computed separately for each sex revealed that the association between conflict and low self-esteem was significant, negative, and strong for girls but not for boys. These particular data on conflict are discussed in detail in Amato (1986), and for this reason are not discussed further here.

The canonical analysis for adolescents revealed that only the first canonical correlation of .59 was significant ( $p < .01$ ). This indicated that per-

**Table II.** Correlations of Family Process and Child Competence Variables with the First Canonical Variate: Primary and Secondary School Children

	Primary school children ( <i>n</i> = 99)	Secondary school children ( <i>n</i> = 102)
Child competence		
Self-control	.70 <sup>c</sup>	.45 <sup>c</sup>
Self-esteem	.53 <sup>c</sup>	.86 <sup>c</sup>
Life skills	.49 <sup>c</sup>	.27 <sup>b</sup>
Social competence	.40 <sup>c</sup>	.58 <sup>c</sup>
Independence	.08	.32 <sup>c</sup>
Reading ability	-.03	-.09
Family process		
Mother support	.70 <sup>c</sup>	.22 <sup>a</sup>
Father support	.48 <sup>c</sup>	.29 <sup>b</sup>
Household responsibility	.33 <sup>c</sup>	.33 <sup>c</sup>
Mother control	.26 <sup>b</sup>	-.06
Family cohesion	.16	.38 <sup>c</sup>
Induction	.09	.33 <sup>c</sup>
Marital conflict	.08	-.08
Sibling relations	-.06	.54 <sup>c</sup>
Father control	-.08	-.56 <sup>c</sup>
Child autonomy	-.20 <sup>a</sup>	.26 <sup>b</sup>
Mother punishment	-.33 <sup>c</sup>	-.21 <sup>a</sup>
Father punishment	-.41 <sup>c</sup>	-.39 <sup>c</sup>

<sup>a</sup>*p* < .05, two tailed.<sup>b</sup>*p* < .01, two tailed.<sup>c</sup>*p* < .001, two tailed.

ceived family processes and adolescent competence were significantly and moderately strongly associated, and that only one dimension was needed to adequately represent the pattern of relations. Table II reveals the overall relationship between the family process variables and the measures of adolescent competence. Adolescents who were generally high in self-esteem, social competence, self-control, independence, and life skills tended to describe their families as having high-quality sibling relationships, high allocation of household responsibility, high cohesion, high parental use of induction, high maternal support, high paternal support, high autonomy, low paternal punishment, low maternal punishment, and low paternal control.

## DISCUSSION

The findings for adolescents are similar to those for primary school children in three ways. First, at both age levels, reports of parental support

were positively associated with general competence, although they appeared somewhat less important for adolescents than for younger children. Second, for both primary school children and adolescents, parental punishment was negatively associated with general competence. Third, the allocation of regular duties to adolescents, as well as to younger children, was associated with high general competence.

Differences between adolescents and younger children were also apparent. First of all, while the quality of sibling relations was essentially unrelated to the competence of primary school children, it was strongly associated with the competence of adolescents. Zero-order correlations confirmed that the quality of sibling relations was positively and significantly associated with self-esteem, social competence, self-control, and independence among adolescents, but not among younger children.

Explanations for the importance of siblings to adolescent competence come readily to mind. In relation to self-esteem, at a time of life when relations with peers are particularly important, feelings of self-worth are likely to be enhanced by acceptance and support from siblings. And because adolescents are more self-conscious than younger children, they are likely to be more sensitive to their siblings' appraisals. With regard to social competence, successful interaction with siblings and the development of close relationships provide opportunities for the learning of social skills that can be extended to peers. As for self-control, older siblings may set examples for younger adolescents and may help parents to enforce family rules, thus facilitating the internalization of standards and the self-regulation of impulses among younger adolescents. In addition, successful interaction with siblings requires that adolescents learn to share and take turns, thus fostering self-control. Finally, in relation to independence, relationships with siblings are likely to serve as stepping-stones between early parental relationships and extrafamilial relations with peers and other adults.

A second difference between the two age groups involved the level of parental control and the corresponding level of child autonomy. For example, while mother control was positively associated with competence among primary school children, it was not associated with competence among adolescents. More importantly, father control stood out as being fairly strongly negatively related to competence among adolescents, but not among younger children. Similarly, parental induction was not associated with competence among younger children, but it was among adolescents. Finally, while the level of autonomy reported by children was *negatively* associated with the competence of primary school children, it was *positively* associated with the competence of adolescents—a complete reversal in the direction of the correlation.

These findings suggest that heavy control by fathers and a low level of child autonomy—particularly when combined with low levels of parental

support and high levels of coercive punishment — bode poorly for the development of competence in adolescent children. This interpretation is consistent with the notion that autonomy is an important goal for most adolescents, and that its encouragement, in line with the growing maturity of the child, can help facilitate adolescent development.

The present results indicate that family processes continue to be bound up with adolescent development, but in a manner different from that of younger children. Among primary school children, the most important family processes to emerge in the analysis were mother and father support, whereas among adolescents, the most important processes were the quality of sibling relations and parental control practices. These differences reflect the developmental stages—and hence, the different interests and needs—of the two groups. Primary school children are more dependent on parents for practical assistance and emotional support than are adolescents. On the other hand, autonomy and self-reliance are more salient concerns for adolescents than for younger children, and relations with similarly aged others, rather than parents, naturally come to the fore.

## CONCLUSION

Although it is often presumed that the direction of effects run mainly from the family environment to the child, it is clear that children and adolescents also have effects on their parents and other family members (Bell, 1968; Bronfenbrenner, 1979; Maccoby and Martin, 1983). It is likely, therefore, that well-adjusted and competent children contribute to a positively functioning family. For example, parents of competent adolescents probably find it easier to be supportive and to grant autonomy than do parents of adolescents low in competence. The present analysis, being based on cross-sectional data, cannot determine whether it is parents and other family members who are affecting the children, or whether it is the children who are affecting their families. In fact, the method of statistical analysis used—canonical correlation—requires no assumptions about which set of variables are independent and which set of variables are dependent; it merely shows the pattern of relations between the two.

The most reasonable interpretation of the data is probably one that acknowledges reciprocal effects between adolescents and their families. This interpretation is consistent with family systems theory, which views cause and effect relations between all family members as mutual (Kantor and Lehr, 1975). Competent children, therefore, can be seen to be engaged with their families in benign circles of socialization through which both children and their families experience mutual satisfaction and growth (Amato and Ochiltree, 1986b; Smith, 1969). However, given that the optimal family environments

for younger children and adolescents are rather different, the present results suggest that competence-building families are those that are able to adjust successfully to the growing independence and changing needs of their adolescent children.

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