Intergenerational Continuity in Parenting Quality: The Mediating Role of Social Competence

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Keywords: parenting, intergenerational continuity, social competence, prospective

Developmental scientists have long been intrigued by the questions of intergenerational continuities and discontinuities in parenting; that is, whether and why children grow up to replicate or diverge from the quality of parenting they have received. Potential developmental processes that may explain intergenerational transmission or change in parenting from one generation to the next have been considered conceptually and empirically. Theory and data suggest that parenting experiences may engender the development of behavioral patterns in children that, in turn, are carried forward into their subsequent behavior and eventually into their parenting of their own children (Capaldi, Conger, Hops, & Thornberry, 2003; Serbin & Karp, 2004). The goal of the present study was to examine the role of developing social competence with peers as a key mediator in the pathways from parenting quality received in childhood to parenting quality given in adulthood to the next generation of children.

The quality of parenting has been widely implicated as a risk and protective factor in the development of psychopathology, competence, and resilience of children (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Luthar, 2006; Serbin & Karp, 2004). Both basic research on families and parenting interventions designed to improve child behavior have corroborated theory concerning the potential role of parents in child development across multiple outcome domains. Evidence is particularly strong in regard to parenting quality as a predictor of both behavior problems and successes in various domains of competence in early childhood and the school years (Luthar, 2006; Masten, Burt, & Coatsworth, 2006). Less evidence has accumulated on the long-term significance of early parenting for later success in the developmental tasks of young adulthood, although the limited data support the predictive significance of parenting quality received in childhood or adolescence for doing well as an adult (e.g., Masten et al., 2004). In this study, we examined the significance of parenting quality received in childhood for the development of parenting quality demonstrated 20 years later in early adulthood, testing whether positive adaptation in the form of social competence mediates this prospective connection.

Although parenting practices are arguably determined by numerous factors (Belsky, 1984), a person’s own history of parenting is a widely implicated source of influence. The basic premise that patterns of parenting behavior tend to be concordant across generations has received considerable attention (e.g., Belsky & Jaffee,
2006; G. R. Patterson, 1998; Putallaz, Costanzo, Grames, & Sherman, 1998; Serbin & Karp, 2004; van Ijzendoorn, 1992) and has been brought to bear on many issues in developmental psychology, from the prediction of child abuse and neglect to explanations of the transmission of human capital. Although many studies have examined parenting as the mechanism by which behavioral patterns or personality traits are transmitted across generations (e.g., Conger et al., 1992; Smith & Farrington, 2004), less research has specifically identified parenting or the parent–child relationship as the outcome of interest. Furthermore, empirical evidence to support this premise of intergenerational continuity of parenting has been limited for a number of reasons.

Many of the studies on the continuity of parenting quality have focused on the transmission of poor or harsh parenting and specifically on the cross-generational prediction of maltreatment (e.g., Egeland, Jacobvitz, & Sroufe, 1988; Herrenkohl, Herrenkohl, & Toedter, 1983; Pears & Capaldi, 2001) and harsh parenting (e.g., Conger, Nepp, Kim, & Scaramella, 2003; Huesmann, Eron, Lefkowitz, & Walder, 1984; Rodriguez & Sutherland, 1999). This body of work has yielded evidence for intergenerational continuity that is mediated by externalizing or aggressive behavior toward others. At the same time, however, some investigators have observed intergenerational discontinuity (i.e., disrupting the cycle of abusive or harsh parenting), suggesting that positive, supportive interpersonal relationships may function in protective ways for parents (Caliso & Milner, 1992; Egeland et al., 1988). To date, much less research has focused on the continuity of good or constructive parenting to determine whether receiving warm and supportive parenting predicts one’s own parenting competence (Serbin & Karp, 2004). This is particularly important because positive and supportive parenting is widely conceptualized as more than the absence of harsh or abusive parenting (Belsky, Jaffee, Sligo, Woodward, & Silva, 2005; Chen & Kaplan, 2001).

The methods used to study the intergenerational continuity of parenting have varied. Many studies have used retrospective methods for data collection, often with parents (identified in the literature as the second generation, or G2) providing retrospective reports of the parenting that they received in childhood from their own parents (identified as the first generation, or G1). For example, Lundberg et al. found significant associations in retrospective reports of parental warmth (i.e., perceived parenting) across two generations (Lundberg, Perris, Schlette, & Adolfsson, 2000). A similar relation between retrospective recall of received parenting quality and self-reported current parenting practices was reported by Brook, Tseng, Whiteman, and Cohen (1998). Although the use of retrospective data is common in the literature, not least because of its efficiency for data collection, such reports are vulnerable to bias by the respondents’ current perceptions or inaccurate recall. Similarly, relying on one reporter to provide both retrospective reports of their history of received parenting and reports of their current parenting practices may lead to estimates of interrelation that are inflated by common informant variance.

More recently, questions of intergenerational continuity in parenting practices have been addressed using prospective (and quasi-prospective) methods, which serve to address some of the shortcomings of retrospective research. In fact, many of these studies have included retrospective methods for assessing the participants’ own parenting histories but then followed the participants over time as they became parents. Several of these longitudinal and quasi-prospective studies have shown that histories of supportive parenting predict participants’ later positive and supportive parenting practices with their own children (e.g., Belsky, Younghandle, & Pensky, 1990; Chassin, Presson, Todd, Rose, & Sherman, 1998; Cox et al., 1985). Multimethod research from the Family Transitions Project, a longitudinal study of an Iowa cohort, has shown that observed G2 parenting quality is predicted not only by retrospective reports of positive, supportive parenting from G1 (Simons, Beaman, Conger, & Chao, 1993), but also by observations of G1 parenting (Conger et al., 2003). Using prospective longitudinal data from the Dunedin Multidisciplinary Heath and Development Study, Belsky et al. (2005) found that G1 positive parenting during childhood and adolescence predicted observed warm-sensitive-stimulating G2 parenting in adulthood.

In continuing efforts to investigate the intergenerational continuity of parenting practices, identifying potential mediating processes is a priority (Rutter, 1998). The burgeoning availability of longitudinal, prospective data enables more rigorous statistical analyses of mediating processes by clearly establishing the temporal precedence of the predictor, and subsequently the mediator, to the outcome of interest (Kraemer, Stice, Kazdin, Offord, & Kupfer, 2001). To identify possible mediators of the intergenerational transmission of parenting practices, researchers have looked to the kinds of behaviors and patterns of adaptation that parenting practices engender.

In the literature on the intergenerational transmission of harsh parenting, there has been an emphasis on externalizing or aggressive behavior as a potential mediating mechanism; such studies have shown promising results (e.g., Caspi & Elder, 1988; Conger et al., 2003). Fewer studies have considered domains of psychosocial functioning that may serve as possible mediators in the intergenerational transmission of positive parenting quality. One compelling example has been presented by Chen and Kaplan (2001), who tested social competence (i.e., self-ratings of social participation and quality interpersonal relationships) as a possible mediator of the intergenerational continuity of warm, supportive parenting in a large, prospective sample of schoolchildren identified in seventh grade, who were followed up in their 20s and again in their 30s. The quality of G1 parenting (i.e., children’s perceptions that they received good parenting and that they were happy with their relationships with their parents) was measured via child self-report at the baseline assessment, and their own G2 parenting quality (i.e., a composite of self-reports of monitoring, communication, and discipline) was measured at the third assessment. Chen and Kaplan’s results showed moderate continuity in parenting across generations, and this continuity was significantly mediated by their measures of social competence, controlling for sociodemographic variables such as gender, parental education, and family poverty (Chen & Kaplan, 2001). This mediating effect was partial; when the mediating pathway through social competence was included in their analytic model, the direct path from G1 to G2 parenting still remained statistically significant.

The selection of social competence as a potential mediator of intergenerational continuity in parenting is supported by theory and research from multiple areas of developmental psychology, including theory and research on attachment, close relationships, and social learning theory. These developmental theories suggest that parenting is associated both theoretically and empirically with child competence in multiple domains of behavior (e.g., Shaw & Bell, 1993). Social learning theory provides one explanation for
the processes by which effective or ineffective parenting may affect children’s behavior. Social learning theory emphasizes learning by observation and the reinforcement of social interaction patterns and positive or negative behavior in the family context, which children then take forward into their future interactions with others in peer groups, classrooms, and eventually their own family relationships (Bandura, 1977; G. R. Patterson, 1975). Longitudinal studies of parenting as it relates to later behavior support these models of processes by which parenting may influence development (Brody, Murry, Kim, & Brown, 2002; Dogan, Conger, Kim, & Masyn, 2007). Empirical research has also specifically invoked social learning theory to explain how parenting behavior and practices may be transmitted to the next generation (e.g., Capaldi, Pears, Patterson, & Owen, 2003; Conger et al., 2003; Simons, Whitbeck, Conger, & Chiy-In, 1991). Most of the studies that have adopted a social learning model have focused on antisocial behavior with less emphasis on prosocial relationships, although there is evidence that authoritative parenting (which balances warmth and support with structure and limit-setting) is associated with social competence in adolescence (Lamborn, Mounts, Steinberg, & Dornbusch, 1991).

Attachment theory also seeks to explain other processes by which parenting may lead to child competence by positing that secure relationships with the caregiver in early childhood will predict later competence in multiple domains, including social relationships (Berscheid & Regan, 2005; Sroufe, Egeland, Carlson, & Collins, 2005; van IJzendoorn, 1992). Attachment theory provides an organizational perspective on development (Sroufe & Waters, 1977) in which internal working models or cognitive representations of relationships are established in the context of early caregiving relationships and carried forward to influence multiple domains of psychosocial functioning (Bowlby, 1982; Sroufe et al., 2005). The impact of attachment history on future parenting could either occur via a direct path, by the application of representations of caregiving to one’s own parenting practices, or indirectly through the influence of representations of relationships to interactions with peers and others, developing relationships and social competencies that are ultimately applied to one’s own parenting (van IJzendoorn, 1992). Although there is certainly evidence for straightforward intergenerational continuity in the studies of parenting that are informed by attachment theory (e.g., Benoit & Parker, 1994; Fonagy, Steele, & Steele, 1991), there is also evidence from attachment theory that the influence of early caregiving may be indirect, through its mediating influence on the development of psychosocial competence. Social competence has been particularly associated with attachment security, and early secure attachment in infancy has been shown to predict social competence later in childhood (Booth, Rose-Kransnor, & Rubin, 1991; Freitag, Belsky, Grossmann, Grossmann, & Scheuerer-Englisch, 1996; Sroufe, Egeland, & Kreutzer, 1990).

The study of close relationships is based on the organizational perspective of attachment theory (Berscheid & Regan, 2005; Hazan & Shaver, 1994) and also offers explanatory models linking behavior in one kind of relationship to subsequent behavior in other relationships and contexts (Hazan & Shaver, 1994). Close relationships theory in adulthood has thus far been primarily applied to romantic relationships (Belsky & Cassidy, 1994; Hazan & Shaver, 1994; Waters & Cummings, 2000), with less attention paid to adult friendships and social competence in nonromantic relationships, although it provides a useful framework for studying continuities between parent-child relationships and the child’s other social relationships, as in the current study. Although the realms of peer relationships and parent-child relationships were once considered separately as developmental domains (Hartup, 1980), more contemporary developmental views from close relationships theory indicate that these relationships with parents and with peers are tightly intertwined and mutually influential (Domitrovich & Bierman, 2001; Sroufe, Egeland, & Carlson, 1999). In particular, empirical research has shown that success in social competence (i.e., social skills, friendship formation) does not derive only from experiences with peers and friendships, but also from early family experiences (Pettit, Dodge, & Brown, 1988). There is substantial evidence that parenting quality received in childhood predicts success in many developmentally salient areas of competence, including peer relationships (Elicker, Englund, & Sroufe, 1992; Luthar, 2006; Masten & Shaffer, 2006; Parke & Buriel, 1998), and numerous studies have demonstrated positive associations between parental support and social functioning or peer status (e.g., Domitrovich & Bierman, 2001; Dubow, Tsak, Causey, Hryshko, & Reid, 1991; C. J. Patterson, Kupersmidt, & Griesler, 1990).

Currently, less research has focused on the developmental antecedents of social competence in emerging adulthood, although there is some empirical evidence that childhood parenting quality predicts social competence at the transition to adulthood (Burt, Obradović, Long, & Masten, 2008; Smart & Sanson, 2003). Furthermore, the interplay between relationships with peers and relationships with parents is ongoing (Collins & Laursen, 2004) and is likely to be reciprocal or transactional in nature, which suggests that indirect processes may account for a substantial portion of the observed continuity in parenting across generations. However, the role of social competence in mediating the continuity of parenting quality across generations remains relatively unexplored.

Developmental theory and empirical evidence also underscore the significance of social competence with peers in childhood and adolescence for subsequent development in multiple domains of adult competence, including parenting (Masten et al., 2006; Parker, Rubin, Erath, Wosjlawowicz, & Buskirk, 2006). Theories concerned with developmental tasks or issues (e.g., Havighurst, 1972; see Masten et al., 2006), including the organizational theory of development (e.g., Sroufe, 1979; Waters & Sroufe, 1983), propose that competence in one period of development serves as a foundation for future competence. Similarly, attachment theory and close relationships theory (Hazan & Shaver, 1994; Waters & Cummings, 2000), as noted above, highlight the coherence of relationships across development; this would not only predict relations between received parenting quality and later social competence with peers, but also predict that the same orientation toward positive relationships and expectations regarding interactions between the self and others would carry over to the developmental domain of parenting one’s own children. These conceptual frameworks concur in predicting that effective parenting and associated positive attachment relationships with parents in early childhood, for example, will promote success with peers in the school years, which in turn will contribute to later mature friendships, romantic relationship quality, success in the workplace, and parenting of the next generation, albeit through complex processes.
Empirical findings, though somewhat limited in terms of longitudinal data spanning childhood to adulthood, offer support for this expected heterotypic continuity in competence (e.g., Masten et al., 1995; Roisman, Masten, Coatsworth, & Tellegen, 2004; see evidence reviewed by Parker et al., 2006).

These developmental perspectives on parenting and social competence converge in suggesting that effective parenting, both early and ongoing, contributes to the development of social competence of children in multiple domains, as well as to children’s capabilities and relationships that continue to facilitate competence in ongoing and emerging domains over time, eventually including parenting competence in the next generation. In the context of these theoretical and empirical observations, the present study examined the prospective linkages between G1 parenting quality, G2 social competence, and later G2 parenting quality in a cohort of individuals followed for 20 years, from childhood into young adulthood. Direct and indirect effects of G1 parenting quality on later G2 parenting quality were tested. Data for this study were drawn from the Project Competence longitudinal study of a normative cohort of 205 children and their parents. G1 parenting quality, including measures of warmth, structure, and closeness, was assessed in this study as a central promotive and protective factor for the development of competence; G2 parenting quality was assessed as a developmental task of adulthood for the cohort who became parents over the course of the study.

Competence was defined in terms of effective performance in age-salient developmental tasks (Masten & Powell, 2003). Beginning at the outset of the study, when the cohort were in the third to sixth grades of elementary school, social competence with peers was a central focus of assessment. Consistent with previous researchers who have noted that social competence is best assessed by incorporating aspects of sociometric status as well as friendship quality (Raver & Zigler, 1997; Rose-Krasnor, 1997), the current study incorporated social acceptance, peer popularity, and friendship quality measures into the broad adaptive construct of social competence. As the participants grew up, assessments of social competence and other core developmental tasks changed to reflect development within domains (e.g., more mature quality of friendships in the social domain in the transition to adulthood) and the emergence of new domains, including parenting competence (Masten et al., 1995; Roisman et al., 2004). Despite changes in measurement, significant continuity in social competence over time has been reported in this sample (Burt et al., 2008; Roisman et al., 2004), consistent with theory regarding the cumulative nature of success in salient developmental tasks as noted above. Similarly, the measurement of received parenting quality changed as the participants matured, reflecting normative developmental changes in what is construed as effective parenting at different ages (i.e., authoritative parenting in middle childhood, but less focus on discipline and more on closeness and support in the transition to adulthood). Findings from earlier publications in this longitudinal project support the significance of G1 parenting quality for the achievement of competence in age-salient developmental tasks of G2 in childhood, adolescence, and adulthood (Masten et al., 1988, 1999, 2004). The parenting quality of the G2 target participants also has been considered as one of multiple criteria for judging overall adaptation in a person-focused analysis of resilience in this longitudinal study, associated with but also quite distinct from other broad competence domains, such as work success or competence in romantic relationships (Masten et al., 2004). However, neither predictors of parenting quality in the second generation nor the intergenerational continuity of parenting quality have been examined in earlier publications from this project.

The hypotheses for the current study were tested by a series of nested path models that examined questions of developmental continuity, direct and indirect paths of intergenerational transmission, and interrelations and transactional effects between relationship domains. These nested models are presented in Figure 1. First, we tested within-domain continuity and cross-domain concurrent relations, hypothesizing that both G1 parenting quality and social competence would show significant continuity from childhood to young adulthood and that G1 parenting quality and social competence would show concurrent interrelations at each assessment. We then tested the role of social competence as a mediator linking G1 parenting quality in childhood to G2 parenting quality in young adulthood. Subsequently, we tested a competing model that added a direct intergenerational path between the parenting variables. We further tested the robustness of these cross-domain relations by examining additional transactional effects and by statistically controlling for two potential common cause variables (participant IQ and family socioeconomic status). The age at which G2 participants became parents was also considered as a covariate to account for possible differences in G2 parenting quality, based on research demonstrating that younger parent age is a risk factor for poorer parenting quality (Brooks-Gunn & Furstenberg, 1986; Fergusson & Woodward, 1999). Next, the robustness and uniqueness of the social competence mediator model was tested against other potential mediators by including variables assessing personality and conduct. By comparing social competence to the personality domain of constraint (i.e., high behavioral control vs. impulsivity and undercontrol) and the competence domain of conduct (i.e., following vs. breaking the rules of conduct in home, school, and society), we aimed to test the specificity of social competence as a mediator by examining the alternative explanation that demonstrated parenting quality in young adulthood is predicted primarily by the contributions that early parenting makes to the development of good behavior and self-control. Conduct, in particular, represented a stringent test of the social competence pathway model, because it has been previously identified as a mediator in the intergenerational continuity of harsh parenting (e.g., Caspi & Elder, 1988; Conger et al., 2003). Finally, we explored the possibility that the findings might vary by participant gender and ethnicity.

Method

Sample and Procedure

The sample for the current study was drawn from a larger sample of 205 children (56% female, 29% ethnic minority) involved in a 20-year longitudinal study of competence and resilience (see Masten et al., 1999, 2004). Participants were recruited from two urban elementary schools when the children were 8–12 years old and were enrolled in the third to sixth grades. This community sample has been followed for two decades with excellent retention rates (90% of the original cohort).

The current subsample is composed of the 113 participants (67% female, 29% ethnic minority) who had become parents by
the time of the 20-year follow-up assessments, including eight sibling pairs. The subsample had no missing data on any of the overall composite indicators described below. A multivariate analysis of variance comparing participants in the present study, all of whom were parents or stepparents (n = 110), with the nonparents in the Project Competence dataset (n = 92) on our core analysis variables (G1 parenting quality and social competence composites in childhood, emerging adulthood, and adulthood) showed no significant differences by parenting status, multivariate F(6, 173) = 1.57, ns. The children of the target participants ranged in age from 7 months to 17 years at the time of the assessment of G2 parenting quality. The age at which the G2 participants first became parents was also measured for the 111 participants who had biological children (excluding 2 participants who parented stepchildren only) and ranged from 15 years, 0 months, to 31 years, 2 months (M = 22 years, 11 months; Mdn = 22 years, 9 months).

Data for the current study were drawn from three assessments spaced 10 years apart: childhood (around age 10), emerging adulthood (around age 20), and young adulthood (around age 30). Data were also collected during an adolescence assessment (around age 17), but an a priori decision was made to exclude this assessment in the present study for the following reasons: (a) desire for equal time intervals to test mediating effects, (b) inclusion of the most comprehensive assessment periods available, and (c) concerns regarding number of indicators and overall statistical power, given our focus on a subsample of participants who had become parents.

All included assessments focused on the collection of extensive multimethod, multi-informant data. For both the childhood and emerging adulthood assessments, data collection included detailed interviews with participants and their parents, as well as the collection of questionnaire, test, and school record data. In young adulthood, the target participants and their parents were assessed through questionnaires completed primarily by mail and in some cases by telephone (for participants who preferred to complete questionnaires by telephone). At each assessment point, independent ratings of competence and parenting were also obtained from interviewers and/or judges who reviewed tapes or questionnaire data. Scores based on multiple methods and informants were composited through systematic data reduction to provide variables for path analysis.

**Measures**

Information regarding the measurement of constructs, including reliability estimates of the measures and resulting composites, are reported based on the entire study sample, except where indicated.

*G1 parenting quality.* In childhood, G1 parenting quality was based on independent interviews of parents (at home) and target child (typically at school). Parents were visited three times at home, for a total of about 6 hr. The primary parent or guardian, typically the mother, was interviewed, although in some cases interviews included the father as well. The semistructured interview included many questions about parenting and parent–child relationships. Based on the interview, the interviewers completed 30 global ratings of family functioning on 5-point scales. These ratings showed good reliability based on 50 interviews with two interviewers present, each of whom completed independent ratings (see Masten et al., 1988, 1999). Based on factor analysis and high internal consistency, 12 of these ratings were composited for a global index of parenting quality (α = .94). The composited scores included ratings of quality of relationship (1 = parent appears to have a poor relationship with child to 5 = parent appears to have a good relationship with child), overall positive expressed emotion
about the target child ($1 = \text{parent gives the impression as feeling much less positive about the child to } 5 = \text{parent gives the impression to the interviewer as feeling very positive about the target child}$), as well as ratings of the consistency of family rules and amount of parent expectations conveyed to the child. The child interviewer completed ratings about many aspects of the child’s life and functioning, including ratings of parenting and parent–child relationships based on the child’s point of view. For 94 cases, a second rater reviewed audiotapes and transcripts of the child interview to complete independent ratings, maintaining an average intraclass correlation of .78 across all ratings. The child interview ratings included items such as the judge’s rating of child’s closeness with mother or father (ratings included close, in between, not close), positive feelings expressed toward mother (ratings included little or none, some, considerable), and the number and extent of household rules (ratings ranged from few rules to many rules). For these items, judges’ ratings were averaged for a child’s score. Based on factor analysis and high internal consistency, 10 ratings were composited to index parenting quality based on the child interview ($\alpha = .89$). The two global composite scores for parenting quality based on the parent and child interviewers were correlated ($r = .53$), and internal consistency analysis indicated a very high alpha for a 22-item scale ($\alpha = .93$ for a scale of 12 parent and 10 child interview ratings). However, to balance information from child and parent interviews, the two separate composite scores were standardized and averaged to form the childhood composite of G1 parenting quality.

During emerging adulthood, indicators of G1 parenting quality focused on relationship closeness because parental structure and discipline were less developmentally relevant at this age. Four global composite variables, based on information from participant and parent interviews and self-report status questionnaires (SQs), were standardized and averaged to obtain an overall parenting composite. More specifically, the four indicators included the following variables. The first component was a composite of eight ratings ($\alpha = .95$) by the interviewer of the parent (primary caregiver, usually the mother), judging relationship qualities such as warmth (e.g., “How warmly does this person speak of this child?”) rated from 1 (not warm at all to 5 = very warm) and rejection (reversed; “To what degree does this person express hostility and rejection toward this child?”) rated from 1 (not at all hostile to 5 = very hostile and rejecting tone toward child). The second component was a global rating of connectedness to mother, based on the independent ratings of the participant interview by two trained judges, on a 5-point scale (anchor descriptions were high scorers have a close, warm relationship . . . can talk with their mother about important/intimate topics and can use her as a source of support and low scorers have a poor relationships with their mother and may feel distant and alienated from her; intraclass correlation = .87). The third and fourth components were based on SQs completed by parents and also reviewed by independent judges (see Masten et al., 1999). The SQ composites were based on self-ratings and parent ratings of the closeness of the parent–child relationship (e.g., “How close do you feel to . . .”; responses ranged from 1 (not close at all to 5 = very close) and also on ratings by two independent judges, who reviewed each questionnaire and rendered independent evaluations of the closeness of the relationship (intraclass correlation coefficients of the judges’ ratings were .70 for target-informed and .68 for parent-informed ratings). Judges also made a global rating of relationships (how well they get along, closeness) with family of origin on a 5-point scale (i.e., well below average to well above average), a rating that included closeness to fathers as well as mothers. Initial composite scores for target participants’ and judges’ ratings, as well as parents’ and judges’ ratings, were highly correlated (.72 and .75, respectively) and were averaged to form a target-based and a parent-based score. Based on factor analysis and evidence of good internal consistency ($\alpha = .74$), these four components were composited for the emerging adulthood G1 parenting score.

In young adulthood, participants and their parents independently provided questionnaire ratings of the closeness of the relationship between the participant and each parent (e.g., “how close do you feel to your mother/father?”) on a 5-point scale, 1 = not close at all to 5 = very close). Two scores, based on the ratings from the participant and the parent ($r = .42, p < .001$), were composited to create the G1 parenting quality variable for young adulthood. At all time points, G1 parenting quality was assessed separately for each child in a family if more than one child was participating.

G2 parenting quality. G2 participants’ own parenting quality was measured at the assessment in young adulthood for each participant who became a parent over the course of the study and was identified as a parent by the time of the 20-year follow-up assessment. Three scores were obtained. These included (a) an average of two participant SQ items, a self-rating of how well they carry out the job of child care on a 5-point Likert scale (responses ranged from not well at all to extremely well), and a rating of general parenting competence (i.e., “Compared to other parents your age, how well do you think you are doing as a parent?” with responses given on a 5-point scale from not well at all to very well); (b) an average of the two parallel items from the parent SQ, providing G1’s evaluation of G2 parenting competence; and (c) a composite based on evaluations by clinical judges on two global ratings of parenting. The judges made a rating of involvement in parenting (i.e., “How would you rate this person’s degree of involvement in parenting?”) on a scale from 1 (no involvement) to 5 (very high degree of involvement), and a rating of overall parenting quality to parallel the self-ratings and parent ratings (i.e., “Compared to other parents this age, how well do you think this person is doing as a parent?”) rated on a 5-point scale from well below average to well above average). Two judges independently rated the participant on each of these broad items after reviewing the SQ completed by the target participant. Interrater agreement was high (the intraclass correlations of ratings by independent judges were .83 for involvement and .87 for overall parenting quality); ratings were averaged across judges and then across items ($r = .75$) to form this composite. These three composite scores (i.e., participant, parent, and clinical composited ratings) were standardized and averaged ($\alpha = .81$) to provide a single index of G2 parenting quality.

Social competence. The measurement of social competence at each time point was guided by developmental task theory (Havighurst, 1972; Masten & Coatsworth, 1998) and was designed to capture social competence as a broad adaptive construct. Thus, the identified items incorporated multiple dimensions of social competence, including peer acceptance, popularity, and the quality of close friendships. Based on the path analytic approach of the present study, we created composite variables at each time point.
based on the salient social competence indicators for that developmental period.

The childhood social competence composite included peer nominations and child interviews. Component scores included two subscales of the Revised Class Play peer reputation measure (Gest, Sesma, Masten, & Tellegen, 2006; Masten, Morison, & Pellegrini, 1985): Popular–Leader (6 items, \( \alpha = .93 \), 6-month stability = .72 and 17-month stability = .61) and Peer Isolation (2 items; \( \alpha = .80 \), 6-month stability = .61, 17-month stability = .60). The third component was a composite of nine ratings from the child interview (\( \alpha = .95 \)) of the child’s overall social acceptance, close friendships, and getting along well with others (e.g., “develops genuine, close, and lasting friendships,” rated on a 5-point scale from 1 = not at all descriptive to 5 = very descriptive). Although the overall coefficient \( \alpha \) for these variables in the present study was somewhat low (.52), we proceeded with a composite, as these indicators have been shown to load on a single social competence factor in prior latent variable measurement models.

In emerging adulthood, the assessment of social competence included a composite of five component variables (overall \( \alpha = .81 \)) based on interviews, SQs, and items from the parent-reported Competence Rating Scales (CRS). The CRS was developed for this longitudinal study in consultation with Susan Harter and closely modeled on the prepublication version of her perceived competence scales for adolescents and college students and the earlier Perceived Competence Scale for Children (Harter, 1982), which all have the same 4-point scale response format. From the CRS-Parent, we included a composite based on four items pertaining to close friendships and social acceptance (\( \alpha = .87 \), four items, e.g., “Some people do not have a close friend to share things with but other people do have a close friend to share things with” and “Some people are popular with others their age but other people are not very popular”). The second component was a composite of global interviewer ratings based on the parent interview (2 items, \( \alpha = .85 \), e.g., “extent to which [participant] seems to have close, confiding relationships”). The third component was a composite of the two same rating scales based on independent judges’ ratings of the SQ information provided by the parent (two items, \( \alpha = .81 \)), and the fourth was parallel ratings based on the participant’s SQ (two items, \( \alpha = .76 \)). The final component was an eight-item interviewer rating composite (\( \alpha = .94 \)) concerning the participants’ close friendships and general social acceptance (e.g., “relationship with best friend is a close and reciprocal bond”).

Social competence in young adulthood was assessed with an emphasis on the developmental salience of having a close friend during this age, rather than general acceptance by the broad peer group. Three component scores are included in the composite (overall \( \alpha = .71 \)): (a) clinical ratings of close friendship presence and quality based on independent reviews of information collected from participants and their parents (intraclass correlation coefficient = .88); (b) a composite of five participant-reported SQ items assessing satisfaction with close friends and reciprocal emotional support from friends, as well as the close friendship subscale of the CRS (\( \alpha = .80 \)); and (c) a composite of parents’ reports of participants’ friendships, including the close friendship subscale of the CRS as well as a SQ item assessing whether or not the participants’ close friends were good for him or her (\( \alpha = .71 \)).

**Control variables.** Potential common-cause variables of intellectual functioning and socioeconomic status were collected at the first two time points of the current study (childhood and emerging adulthood), and descriptive statistics for each of these variables are drawn from the subsample for the current study (i.e., G2 participants who became parents). At both times, general intellectual functioning (IQ) was estimated by a composite of two Wechsler subscales that have shown the highest correlation with the full-scale IQ, Vocabulary and Block Design, both of which are normed to means of 10 and standard deviations of 3 on each subscale. The Wechsler Intelligence Scale for Children–Revised (Wechsler, 1974) was used in childhood (Vocabulary \( M = 9.71, SD = 2.51 \); Block Design \( M = 10.45, SD = 3.40 \)) and the Wechsler Adult Intelligence Scale (Wechsler, 1981) was used in emerging adulthood (Vocabulary \( M = 8.40, SD = 2.20 \); Block Design \( M = 10.79, SD = 3.03 \)). Socioeconomic status (SES) was assessed at the same time points via the Duncan Socioeconomic Index (SEI; Hauser & Warren, 1997), using values available for the most pertinent census at the time of each assessment. This score, based on occupational prestige, was calculated for the occupation of the head of household (whichever stable parenting adult in the household had a higher index), both in childhood (\( M = 43.08, SD = 19.65 \)) and emerging adulthood (\( M = 36.18, SD = 17.67 \). The correlations over time (i.e., 10-year stability coefficients) for IQ and SEI scores in the sample were .79 and .67 overall, and .71 and .54 for the parent subsample.

Additional control variables for this study included two alternative mediators, which assessed dimensions of behavior (i.e., conduct) and personality (i.e., constraint) at emerging adulthood that have been implicated in the intergenerational transmission of parenting quality. Conduct was measured via participants’ and parents’ reports of participants’ rule-abiding behavior at home, school, and in the community versus rule-breaking, disruptive, or antisocial behavior, with composite indicators including degree of trouble with law enforcement and aggression or fighting with peers (see Burt et al., 2008, for further description of this measure). The broad-band personality domain of constraint was measured by the Multidimensional Personality Questionnaire (MPQ; Tellegen, 1982; Tellegen & Waller, 2008), a 300-item self-report measure that includes three higher-order personality traits: positive emotionality, negative emotionality, and constraint. Constraint tends to be highly correlated with the personality trait of conscientiousness (Clark & Watson, 1999), and individuals who score highly on constraint tend to be cautious, planful, traditional, and harm-avoidant (Shiner, Masten & Tellegen, 2002) rather than impulsive or undercontrolled in their behavior.

**Statistical Analyses**

The main statistical analyses for the present study were conducted using Mplus (Version 5.1; L. Muthén & Muthén, 2007). Two data issues to consider were nonnormality of some indicators and dependence among observations among siblings. We used a robust maximum likelihood estimator to account for nonnormality of indicators and included an embedded cluster model in each path model to address dependency of observations among eight sibling pairs. To assess model fit, in addition to model chi-square we describe below values of three commonly reported fit indices in path analysis and structural equation modeling: the comparative fit index (CFI), Tucker-Lewis index (TLI), and root mean square error of approximation (RMSEA). Values of CFI and TLI greater
than .95 and values of RMSEA less than .05 generally indicate very close fit to the data, although an absolute reference standard for use of a robust estimator with modest sample size remains unclear (Hu & Bentler, 1998, 1999; Marsh, Hau, & Wen, 2004). Incremental improvement in fit for nested models was assessed using a scaled chi-square difference test (Satorra, 2000).

Models were tested in the following order (see Figure 1). First, as a baseline model (Model 0), we tested within-domain continuity of G1 parenting quality and social competence and cross-domain concurrent relations between G1 parenting quality and social competence. We expected that this model would leave significant sources of covariance unmodeled and thus provide a poor overall fit. We then tested our most parsimonious hypothesized model of social competence as a mediator linking G1 parenting quality in childhood to G2 parenting quality in young adulthood. In this model (Model 1 in Figure 1), we freely estimated paths from G1 parenting quality in childhood to social competence in emerging adulthood and from social competence in emerging adulthood to G2 parenting quality in young adulthood. Subsequently, we tested a competing model adding a direct intergenerational path between the parenting variables (Model 2). In Model 3, we tested a more complex set of additional transactional effects between social competence and G1 parenting quality (Model 3).

After selecting a final model based on parsimony and relative fit, we further examined the robustness of the cross-domain relations in several ways. First, we considered two “third variable” explanations for these associations: The final model was reexamined by statistically controlling for two potential common-cause variables, participant IQ and family SES. To account for any possible differences by age of G2 parents, we next ran a multiple-indicator, multiple-cause (MIMIC) model including that variable as a continuous covariate. We then tested two alternative or multiple-mediation models in which (a) rule-abiding conduct and (b) the broad personality domain of constraint were added as additional transactional effects between social competence unmodeled and thus provide a poor overall fit. We then tested our most parsimonious hypothesized model of social competence as a mediator linking G1 parenting quality in childhood to G2 parenting quality in young adulthood. In this model (Model 1 in Figure 1), we freely estimated paths from G1 parenting quality in childhood to social competence in emerging adulthood and from social competence in emerging adulthood to G2 parenting quality in young adulthood. Subsequently, we tested a competing model adding a direct intergenerational path between the parenting variables (Model 2). In Model 3, we tested a more complex set of additional transactional effects between social competence and G1 parenting quality (Model 3).

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### Results

Correlations among all key variables included in our analyses are presented in Table 1. Social competence showed moderate to strong zero-order continuity estimates over time from childhood to young adulthood. G1 parenting quality showed modest continuity over time from childhood to emerging adulthood and from emerging adulthood to young adulthood. In addition, G2 parenting quality in young adulthood was modestly but significantly associated with G1 parenting quality in childhood ($r = .23, p < .05$). IQ and SES showed strong stability over time and zero-order relations with key constructs in childhood but with a mixed pattern of associations in emerging adulthood and young adulthood. Of note, social competence in emerging adulthood was associated with both G1 parenting quality in childhood and G2 parenting quality in young adulthood, thus meeting standard criteria for potential mediation.

### Path Analyses

As described above, a sequence of nested path analytic models was tested, beginning with a model including only within-time associations and continuity in each core construct over time. As expected, this model (designated as Model 0) fit the data poorly. Full fit and model comparison statistics for this and successive models are presented in Table 2. The $c$ coefficient in Table 2 represents the scaling constant used in the chi-square difference test for non-normally distributed indicators (Satorra, 2000); as with all nested model comparisons, a significant chi-square difference implies rejection of the more parsimonious model in favor of a model with more estimated parameters.

Inspection of Table 2 shows that Model 1 (representing mediation of parenting quality associations through social competence in emerging adulthood; see Figure 2) fit the data significantly better than the baseline continuity model, $\Delta \chi^2(2, N = 113) = 32.70, p < .0001$. Although modest, the indirect

### Table 1

Zero-Order Correlations of Variables Included in Path Analyses

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<th>Variable</th>
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<td>1. Parenting quality</td>
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<td>2. Social competence</td>
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<td>3. IQ</td>
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<td>6. Social competence</td>
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<td>9. Rule-abiding conduct</td>
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<td>-.05</td>
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<td>10. Constraint</td>
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<td>.08</td>
<td>-.05</td>
<td>.03</td>
<td>.30**</td>
<td>.06</td>
<td>-.19*</td>
<td>-.01</td>
<td>.22*</td>
<td>-.01</td>
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<tr>
<td>12. Social competence</td>
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<td>.20*</td>
<td>.20</td>
<td>-.01</td>
<td>.14</td>
<td>.30**</td>
<td>.11</td>
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<td>.26**</td>
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<td>13. Target parenting quality</td>
<td>.23*</td>
<td>.32***</td>
<td>.20*</td>
<td>.12</td>
<td>.25**</td>
<td>.35***</td>
<td>.10</td>
<td>.08</td>
<td>.42***</td>
<td>.18</td>
<td>.21*</td>
<td>.38***</td>
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**Note.** Pairwise $N$ ranges from 102 to 113. SES = socioeconomic status.

* $p < .05$. ** $p < .01$. *** $p < .001$. 
effect (.31 \times .35 = .11) of G1 parenting through G2 social competence was statistically significant \((p < .01)\) using the Sobel test (see Cole & Maxwell, 2003, p. 572). Beyond this model, our additional parameters did not significantly improve model fit. In particular, freely estimating an additional direct parameter between G1 parenting quality in childhood and G2 parenting quality in young adulthood did not provide an incremental improvement in fit, and this path was estimated at .07, \(ns\). Additional estimation of “child effects” transactional paths from childhood social competence to G1 parenting quality in emerging adulthood and then to G2 parenting quality in young adulthood were not statistically significant and did not appreciably improve overall model fit. Finally, a freely estimated directional path from G1 parenting quality in emerging adulthood to social competence in young adulthood, to test whether additional mediating effects also occurred in a later developmental window, was not significant (path estimated as .04, \(ns\)).

Control Variable and Covariate Analyses

To further explore the robustness of our main mediation findings, we re-ran Model 1 including indicators of potential common-cause variables (intellectual functioning and socioeconomic status) in childhood and emerging adulthood. As our focus was the cross-domain paths from G1 parenting quality to social competence and vice versa, we set each endpoint of these paths to also load on the IQ and SES variables of the nearest preceding or concurrent time point (see Masten et al., 2005, for additional details on this analytic strategy). This modified model also showed acceptable fit to the data, model \(\chi^2(26, N = 113) = 20.358, p = .77\). Results suggested that inclusion of our common-cause variables did not affect the main results. More specifically, the path from G1 parenting quality in childhood to social competence in emerging adulthood was estimated at .28, \(p < .01\), and the path from social competence in emerging adulthood to G2 parenting quality in young adulthood was estimated at .34, \(p < .001\), controlling for IQ and SES. In this model, the control variables of IQ and SES showed significant concurrent relations with G1 parenting quality in childhood (standardized parameters estimated at .35, \(p < .001\), for IQ, and .34, \(p < .001\), for SES) but no links with emerging adulthood social competence or G2 parenting quality when G1 parenting quality in childhood was also in the model.

A separate model including the age at which G2 participants became parents as a continuous covariate, using MIMIC modeling (B. Muthén, 2002), showed good fit, model \(\chi^2(10, N = 113) = 36.109, p < .001\).
11.88, \( p = .29 \); CFI = .988, TLI = .965, RMSEA = .041. Key mediating paths remained significant in this model, although they were attenuated somewhat (G1 parenting quality to social competence = .22, \( p < .01 \)), and social competence to G2 parenting quality = .22, \( p < .05 \)). Other aspects of the model were consistent with initial runs. Notably, the age of G2 participants at the time they became parents was significantly associated with G1 parenting quality (\( r = .31, p < .01 \)), social competence in emerging adulthood (\( r = .32, p < .01 \)), and G2 parenting quality (\( r = .31, p < .01 \)). Thus, G2 participants who were younger when they first became parents showed poorer quality of received parenting, less social competence, and poorer quality of their own parenting as adults, even though the mediating effect of social competence operated independently of parent age.

**Multiple or Alternative Mediation Tests**

Two additional models tested a multiple mediation pathway including, along with social competence in emerging adulthood, rule-abiding conduct, and the broad personality domain of constraint. The focus of these analyses was examining whether social competence continued to mediate parenting quality intergenerationally with the addition of these other putative mediators to the model. In both models the key mediating paths between parenting quality and social competence remained statistically significant. For the model including constraint, the key standardized paths were each within .02 of their original values (.31 from G1 parenting quality in childhood to social competence in emerging adulthood and .37 from social competence in emerging adulthood to G2 parenting quality in young adulthood, both ps < .001). Constraint did not meet the traditional criteria for mediation from zero-order correlations and showed an unexpected pattern of relations with G1 parenting, being negatively correlated across the first time interval (middle childhood to emerging adulthood) and marginally positively correlated across the second time interval (emerging adulthood to young adulthood). For the model including rule-abiding conduct, the path from emerging adulthood social competence to adulthood parenting quality was attenuated somewhat, though still significant (\( .28, p < .001 \)), and the path from childhood parenting quality to emerging adulthood social competence (\( .32, p < .001 \)) was virtually unchanged. Rule-abiding conduct did not serve as a dual mediator: Although the path from conduct in emerging adulthood to G2 parenting quality was positive and significant, the path (and zero-order correlation) from G1 parenting to conduct was not statistically significant.

**Gender and Ethnicity Invariance Tests**

Our final series of model comparisons involved first estimating a multiple-groups analysis in Mplus by gender and subsequently constraining sets of estimated paths to be equal across gender; parallel tests were also conducted for ethnic minority status. Due to limitations of sample size, these analyses were considered exploratory. For gender, results of the baseline model freely estimating all parameters for both genders showed mixed fit indices, model \( \chi^2(20, N = 113) = 28.241, p = .10 \); CFI = .935, TLI = .871, RMSEA = .078. However, here we were most interested in the relative fit of nested models constraining paths across gender. Following the overall strategy of similar analyses in our prior studies (Burt et al., 2008; Masten et al., 2005), we compared the free model to one in which within-time, continuity, and cross-domain paths were all constrained to be equal across gender. Constraining these paths did not significantly reduce model fit, \( \Delta \chi^2(11, N = 113) = 11.292, p = .42 \). Results were similar for ethnic minority status: An initial model freely estimating parameters across minority status showed acceptable fit, model \( \chi^2(20, N = 113) = 23.029, p = .29 \); CFI = .971, TLI = .942, RMSEA = .052. Constraining paths across minority status did not significantly reduce fit, \( \Delta \chi^2(11, N = 113) = 13.877, p = .24 \). Thus, overall evidence from this series of models suggested that our parameters did not vary substantially across gender or ethnic minority status.

**Discussion**

Results from this study are consistent with the hypothesis that the development of social competence with peers is an indirect pathway through which intergenerational continuity of parenting occurs, linking the experienced quality of parenting in childhood to demonstrated parenting quality in adulthood. Core findings support a mediating role for social competence in the context of a 20-year prospective study spanning childhood through young adulthood.

Results of this study replicate and extend findings reported by Chen and Kaplan (2001) suggesting that social competence—at least in part—may mediate intergenerational transmission of positive parenting. Our results, in contrast to Chen and Kaplan, showed no significant direct effect of G1 to G2 parenting once social competence was considered. The direct intergenerational path reported by Chen and Kaplan had low to moderate effect size, and relied solely on self-report data from the children who ultimately became parents over the course of the study. Thus, it is conceivable that shared method variance due to a single reporter or other measurement differences might account for the significant direct path of intergenerational continuity in parenting quality as reported in that study. Alternatively, the methods used to measure parenting quality in the current study may have attenuated the direct intergenerational association. Specifically, although G1 parenting quality included aspects of parenting practices (i.e., structure and limit-setting, provision of warmth and support) as well as perceived closeness, G2 parenting quality was assessed as a more general domain of competence (i.e., how well the participant is doing as a parent), because the range of G3 child ages precluded more age-specific measures of parenting practices.

Findings from the present study also corroborated the expected patterns of continuity over time within domain for G1 parenting quality and social competence, across each of the 10-year intervals between assessments, and within time in childhood and emerging adulthood. Of note, the longitudinal continuity of the social competence construct supports the notion that the broad domain of social competence exhibits developmental changes that were reflected in the measurement of the construct across the study time points (i.e., increased prominence of close and reciprocal friendships as a key indicator of social competence in adulthood). Furthermore, the within-time association of G1 parenting quality and the social competence of the target participant appeared to decline over time, and the associations were not significant by the time of the 20-year follow-up around age 30. This decline may reflect age-appropriate individuation and autonomy processes in development and the concomitant broadening of social contexts and interactions of the target participants.
The robustness of the mediating role of social competence linking G1 to G2 parenting also was examined by testing the role of IQ, SES, gender, ethnicity, and transactional possibilities in reversing the direction of effects. The G1 parenting to G2 social competence to G2 parenting effects held up in the context of analyses to control for potential “common cause” variables of IQ and SES. Alternative models that tested the reverse transactional paths between social competence and parenting quality over time did not fit as well as the accepted model, and findings also did not vary by target gender or ethnicity. The age at which G2 participants became parents was also considered as a covariate; although key mediating pathways remained significant, the strengths of the associations were somewhat reduced. Notably, G2 age at the transition to parenthood was also significantly associated to the key study variables, indicating that G2 participants who became parents at younger ages had histories of poorer G1 parenting quality, had lower social competence in emerging adulthood, and demonstrated poorer quality parenting with their own children. Overall, these results are consistent with previous research findings that young maternal age at the time of a child’s birth is a risk factor for later development (Obadov, Shaffer, & Masten, in press) and with research indicating that younger parents exhibit lower quality parenting on average than older parents (Brooks-Gunn & Furstemberg, 1986; Fergusson & Woodward, 1999).

Alternative mediators were also tested in tandem with social competence. The personality domain of constraint and the competence domain of conduct were each tested in multiple mediation models to examine the specificity of social competence as a mediator of intergenerational continuity in parenting quality. Constraint and conduct were selected to test the alternative hypothesis that a history of positive parenting quality engenders good behavior in general (i.e., rule-abiding behavior, conscientiousness), which leads to doing well as a parent. In contrast, testing social competence as a mediator emphasizes the importance of forming and maintaining reciprocal relationships and establishes the continuity and coherence of functioning in relationships as the link between parent–child relationships, friendships, and peer relationships, as well as their cumulative influence on one’s own parenting. In all models, social competence remained a significant mediator, thus supporting the importance of social relationships as both an outcome and predictor of parenting quality.

Taken together, results of the current study are congruent with the hypothesized model based on concepts from organizational and close relationships theory and hypotheses about the development of competence and the role of positive parent–child relationships in predicting success in salient developmental tasks (Masten et al., 2006; Sroufe et al., 2005). These theoretical frameworks suggest that the impact of early experience is long-lasting, though not through passive processes. Rather, the influence of early parenting is transformed through active and ongoing influences on developing children’s competence. Results of this study suggest that early parenting quality may contribute to good social skills and development of capabilities to form and keep friendships and other important interpersonal relationships. In turn, successful development of social competence in peer relationships was shown to contribute to better parenting and relationships with one’s own children. According to organizational perspectives on development (Sroufe & Waters, 1977), good social skills are maintained by cognitive representations of relationships as positive, stable, and trusting. Because the current study did not measure the target participants’ cognitive representations or beliefs about parenting, this interpretation requires additional research support. However, the results of this study are consistent with speculation that positive parenting quality in childhood provides socialization toward successful interpersonal relationships that extends across developmentally salient domains, from peer relationships to parenting one’s own children. In concert with the cumulative nature of development, successful achievement of social competence with peers serves to bridge the intergenerational connections in parenting quality by providing a venue in which to demonstrate and refine skills and expectations regarding close relationships. Furthermore, because peer relationships, especially close friendships, are likely to include experiences of providing care and support rather than just receiving care (Hazan & Shaver, 1994), competence in peer relationships may more directly lay the groundwork for one’s own parenting.

The analytic strategy employed in this study represents a methodological advance relative to previously published research on intergenerational parenting continuity, in that the longitudinal relations between parenting quality and social competence controlled for the within-domain continuity for each of these variables, as well as cross-domain correlations at each time point. By using models that account for the longitudinal stability and concurrent correlations of G1 parenting quality and social competence over time, we tested and rejected as unlikely the alternative explanation that the longitudinal associations between G1 parenting quality in childhood, social competence in emerging adulthood, and G2 parenting quality in young adulthood are simply artifacts of intercorrelations that were present early on in the study and carried forward over time.

The findings of the current study are strengthened by several additional aspects of the study design. The data presented here span 20 years and represent a true prospective design, which is preferable to retrospective reports when testing questions of developmental continuity and change. To this end, our analytic strategy accounted for continuity both over time and within time as well as cross-domain interrelations of parenting quality and social competence, thus guarding against spurious results. Multimethod, multi-informant assessments were conducted at each time point, reducing concerns regarding shared method variance or reporter bias. Furthermore, our measures of parenting quality changed over time to reflect the developmental changes that occur in the parent–child relationship in this age span (i.e., emphasizing support and structure in childhood, then closeness in emerging adulthood).

Although this study has many of the features of a prospective, long-term longitudinal design that are recommended for testing intergenerational hypotheses, it also has notable limitations. The sample size was relatively modest, and the parents, the target participants, and the targets’ children varied in age from infancy to adolescence at the time of the assessments, which is not optimal for testing an intergenerational hypothesis (Serbin & Karp, 2004). The first assessment of received parenting quality was measured in middle to late childhood (ages 8–12), whereas many of the previously presented studies have emphasized the importance of parenting quality during early childhood. There is some evidence for the stability of parenting practices from early to middle childhood (e.g., Roberts, Block, & Block, 1984), increasing our confidence that our measures captured the quality of care that was received during this influential age period. Nevertheless, our indices of parenting could be strengthened by the inclusion of independent, observational measures to reduce reliance on self-report measures and to obtain additional information about specific parenting practices that are comparable across generations.
It is also important to note that although we are guided in our conceptualization by tenets of attachment theory, this study does not include measures of attachment security or psychological representations of attachment relationships. In addition to including measures of attachment security from childhood, future research could also include retrospective recall of attachment representation as represented in adulthood. Previous research has shown that how people think about their experiences of being parented predicts how they parent their children (van IJzendoorn, 1992; Ward & Carlson, 1995), suggesting that beliefs about parenting history and current parenting practices would be important variables to incorporate into further studies.

In addition, this study was not genetically informative in design, and this represents an area where future research is needed. Clearly, consideration of shared genes and the complex interplay of genes and experiences of parenting are crucial for a full accounting of intergenerational transmission of parenting. We followed van IJzendoorn (1992) in focusing on the psychological or behavioral transmission of parenting across generations, with the assumption that more genetically informed research designs will soon be applied to the question of intergenerational continuity in parenting.

Future research should also consider how other behavioral pathways through parenting could be carried forward into the parenting of the next generation. Developmental task theory suggests that parental influences on other age-salient developmental tasks of childhood, adolescence, and emerging adulthood could play a role, including academic achievement and rule-abiding versus rule-breaking, disruptive, or aggressive conduct in childhood or adolescence. Theory and empirical evidence also suggest that social competence with friends leads to better quality romantic relationships in adulthood (Roisman et al., 2004), which could provide a more supportive context for parenting. Positive romantic relationships also have been implicated as a protective influence in breaking the intergenerational cycle of violence in maltreating families (Caliso & Milner, 1992; Egeland et al., 1988). Thus, it will be important to examine the quality of romantic relationships in young adulthood in relation to social competence and G2 parenting.

Developmental studies such as these are crucial to highlighting possible opportunities for intervention. Results of this study suggest a potential for intervention strategies that support or facilitate the transmission of positive parenting quality through interventions in other interpersonal domains of functioning, as well as parenting itself. The identification and promotion of key supportive relationships may provide important opportunities for shifting development in more positive directions. Intervention-based studies could test the hypothesized role of social competence for subsequent success in developmental task domains such as parenting while also explaining some instances of intergenerational discontinuity, such as when parenting quality improves across successive generations. Some of these questions may benefit from combining person-centered analyses, focusing on groups of participants who are (or are not) parenting competently, with variable-centered analyses such as those presented here.

Much remains to be learned about the intergenerational transmission of parenting quality and the possible pathways and turning points that may link the effectiveness of parenting in one generation to the successes or difficulties in parenting in the next generation. Results of the current study suggest that developmental processes in the domain of social competence represent a promising direction for future research.

References


