# Socioeconomic Status and Patterns of Parent–Adolescent Interactions

# Edith Chen

University of British Columbia

# Louise E. Berdan

University of North Carolina

This study investigated reciprocity in parent–adolescent interactions among 102 families from lower or higher socioeconomic status (SES) backgrounds. Negative behaviors between parents and adolescents were more reciprocal (strongly correlated) in higher SES than lower SES families, and this reciprocity correlated with higher family relationship quality. Lower SES families exhibited reciprocity related to withdrawn behaviors. Reciprocity of these behaviors also correlated with higher relationship quality. Results suggest that SES differences provide insights into a more complex understanding of family relationships within contexts, and importantly, suggest that different types of reciprocity may each have its own adaptive value in families from different SES backgrounds.

Lower family socioeconomic status (SES) is associated with a variety of child and family outcomes, including harsher discipline practices, less parent–child communication, and greater child externalizing behavioral problems (Bradley & Corwyn, 2002; Elder, Vannguyen, & Caspi, 1985; McLoyd, 1998; Smetana, Crean, & Daddis, 2002). Moreover these relationships with SES are distinct from effects of being a member of an ethnic minority group (Bradley, Corwyn, Mcadoo, & Coll, 2001; Luthar, 1994).

Requests for reprints should be sent to Edith Chen, Department of Psychology, University of British Columbia, 2136 West Mall, Vancouver, BC, Canada V6T 1Z4. E-mail: echen@psych.ubc.ca

One proposed explanation for these relationships is that low SES families have different styles of interacting from high SES families, and that these interaction patterns in turn contribute to more general outcomes for the child and family.

Although previous literature has found that low SES families report greater use of physical discipline and more inconsistent disciplining practices (Conger et al. 1992; Dodge, Pettit, & Bates, 1994; McLoyd, 1990; Sampson & Laub, 1994), much of this research has focused on unilateral characteristics of relationships, such as parent authority over the child. More recently, researchers have emphasized the importance of the reciprocal effects of a dyad. There is evidence to suggest that positive reciprocity or synchrony between parents and children is beneficial for child and family outcomes; however, this research to date has focused on young children and on positive behaviors (Harrist & Waugh, 2002). For example, positive parent–child synchrony predicts higher social competence and fewer behavioral problems in preschoolers, as well as fewer adjustment problems during the transition to kindergarten (Deater-Deckard & O'Connor, 2000; Harrist, Pettit, Dodge, & Bates, 1994; Mize & Pettit, 1997).

During adolescence, parent-child interactions include more conflict and less warmth compared with earlier in childhood (Paikoff & Brooksgunn, 1991). However, concepts of reciprocity are hypothesized to remain important (Chu & Powers, 1995). Given that negative behaviors and conflict rise during adolescence, the understanding of reciprocity during adolescence may need to include negative behaviors as well as positive ones. For example, during adolescence, having a parent who is more responsive to negative emotions may help youth better adapt to the social, emotional, and physical changes that accompany adolescence.

The present study is unique in (1) focusing on the period of adolescence in studying reciprocity in parent–child interactions; and (2) investigating both positive and negative behaviors for reciprocity. This research seeks to advance our understanding of SES-related family relationship characteristics in two ways. First, we test how families from different SES backgrounds differ in reciprocity of parent and adolescent behaviors during interactions. This will broaden our understanding of SES family relationship patterns from unilateral dimensions (parent discipline) to partnership dimensions (reciprocity in relationships). With increasing assertions of independence occurring during adolescence, these partnership aspects of family interactions are important to understand. Second, this study focuses on interaction patterns with adolescents, which has received very little attention in the reciprocity, or synchrony, literature. Given this unique developmental period, this study asks whether reciprocity for both positive and negative behaviors are important to consider in adolescence.

### METHOD

## Participants

One hundred and two families were recruited by targeting adolescents in public high schools in the St. Louis area with a wide range of SES. Student ages ranged from 14–18 years (mean 15.61). Fifty-three percent were females; 75% were Caucasian, 24% were African American, and 1% "other." Ninety-three percent of parents were mothers.

# Laboratory Task

Families participated in a standardized laboratory task involving disagreement, similar to tasks used in other acute laboratory stress studies (Smith, Gallo, Goble, Ngu, & Stark, 1998). This task was the "Desert Survival Situation," where participants were asked to rank order the importance of 15 items for survival in the desert (Human Synergistics, Plymouth, MI). To maximize disagreement, each family member was asked to first do the task individually. The items are ones whose utility for desert survival are not intuitive (e.g., red and white parachute), and thus individuals often derive very different rankings when they complete this task on their own. Family members were then brought together and asked to come to agreement on one joint list of rankings. Tasks were videotaped; equipment malfunction occurred for one family.

# **Behavioral Coding**

The Scale of Intergenerational Relationship Quality (SIRQ) was used to code parent and adolescent behaviors during the joint task (Wakschlag, Chase-Lansdale, & Brooks-Gunn, 1991). Behaviors are rated on a five-point scale, with 1 being "highly uncharacteristic," and 5 being "highly characteristic" of the participant during the interaction period. Items are rated for both the parent and adolescent. Items include affect scales: cheerful/animated, warmth/caring, angry/hostile, and withdrawn/ apathetic, and two relevant items from the Individuation scale—validation of the other's perspective, and demandingness. One coder who was blind to study hypothesis rated all videos. Fifteen percent of videotapes were coded by a second rater, with inter-rater reliability of .81 (average correlation across the scales for the two raters), and average weighted  $\kappa$  of

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.63, similar to other studies with this measure (Wakschlag, Chase-Lansdale, & Brooks-Gunn, 1996).

#### Questionnaires

*Family relationship quality.* The family environment scale (FES) assesses the social environment of families (Moos & Moos, 1981). The family relationship dimension includes: Cohesion, feelings of togetherness in the family; Conflict, amount of openly expressed anger, aggression, and conflict in the family; and Expressiveness, encouraging family members to act openly and express feelings directly. Higher scores indicate greater cohesion, conflict, or expressiveness. Both parents and adolescents completed this measure.

#### Procedures

This study was approved by the Institutional Review Board at Washington University. One adolescent together with one parent at a time participated in the study protocol. In separate rooms, the adolescent and parent were asked to rank the 15 items in order of importance to their survival in the desert. Once each family member finished their rankings, and had individually discussed their reasons for each ranking (thus getting them invested in their individual rankings), they were brought together, and told that they had 8 minutes to come to agreement and produce one joint list of rankings for all 15 items. As an incentive, families were eligible for a \$20 bonus if their final ranking score closely matched the expert's ratings (provided with the manual). At the end, parents and adolescents completed the FES.

#### RESULTS

Our goal was to compare differences in the magnitude of the correlations between parent–adolescent behaviors for lower versus higher SES groups. Thus we categorized families into lower or higher SES based on a median split of Hollingshead scores, derived from parent report of family education and occupational status (Hollingshead, 1975). Parents in the lower SES group fell on average into the "skilled manual worker" group (M = 4.72 on a 1–9 scale, SD = 1.33). Parents in the higher SES group fell on average into the "administrator/professional" occupation group (M = 8.18, SD = .78). Parents in the lower SES group had on average 1 year of posthigh school education (M = 13.73 years, SD = 1.73). Parents

in the higher SES group had on average graduate school education (M = 17.73 years, SD = 2.34).

#### Associations Between Parent and Adolescent Behavior

To measure reciprocity, we examined how highly correlated parent and adolescent behaviors were during the interaction task. To test our hypothesis about reciprocity differing between lower and higher SES families, we tested whether the magnitude of correlations statistically differed between the two groups using Fisher's transformation to z, with values of 1.96 or higher indicating a significant difference between correlations using a two-tailed distribution and p < .05.

For positive emotions and behaviors (cheerful, warmth, and validation of perspective), parent and adolescent behaviors were positively and significantly correlated in both lower and higher SES families. That is, to the extent that adolescents were cheerful, warm, and validated their parent's perspective, parents did the same (p's < .05). The magnitude of correlations for positive behaviors did not differ between lower and higher SES families (p's > .2).

In contrast, for negative emotions and behaviors such as anger and demandingness, reciprocity was greater in higher SES families than in lower SES families. When higher SES adolescents expressed anger, their parents also expressed anger, r = .61, p < .001. The magnitude of this correlation was greater in higher SES families compared with lower SES families (r = .28), z = 2.04, p < .05. Similarly, when higher SES adolescents were demanding, their parents exhibited greater anger, r = .37, p < .01. The association among lower SES families was not significant (r = .10); however, the magnitude of the two correlations did not differ statistically, z = 1.40.

In addition, when higher SES adolescents were more demanding, parents validated their perspective less often, r = -.36, p < .05. This correlation was significantly greater in higher SES families compared with lower SES families (r = .08), z = 2.20, p < .05. Similarly, when higher SES adolescents were more angry, their parents validated their perspective less often, r = -.51, p < .001. This correlation was marginally greater in higher SES families than lower SES families (r = -.19), z = 1.79, p = .07. Finally, when parents were more angry, adolescents validated their perspective less, r = -.32, p < .05. The association in lower SES families was not significant (r = -.13), although the magnitude of the correlations did not differ, z = 1.02.

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Among lower SES families, there were several significant associations related to withdrawn/apathetic behaviors. When lower SES adolescents were more withdrawn, parents engaged in less cheerful behavior, r = -.29, p < .05. Similarly, when lower SES parents were more withdrawn, adolescents engaged in less cheerful behaviors, r = -.30, p < .05, and fewer warmth/caring behaviors, r = -.32, p < .05. These correlations were not significant in the higher SES group (r's from -.09 to -.14). However, correlations did not differ significantly in magnitude between the lower and higher SES group (p's > .2).

#### **Reciprocity of Parent-Adolescent Behaviors and Family Outcomes**

We next tested whether the above patterns were associated with general family outcomes. To do this, we examined whether the degree of reciprocity, or coupling, between parent and adolescent behavior during the task correlated with general family relationship quality. For example, if a certain interaction pattern is beneficial, then greater coupling within a dyad should be associated with positive family outcomes in that same dyad.

This type of analysis requires a score for each family dyad, rather than a correlation across the group. To quantify coupling within a dyad, we calculated the absolute difference between parent and adolescent scores, with lower difference scores indicating tighter coupling of behaviors. We reversed scored positive behaviors prior to calculating absolute difference scores between positive and negative behaviors, given that these were inversely correlated. Thus for all calculated scores, higher scores indicate a greater discrepancy between parent and adolescent behavior, or less coupling.

We then examined whether greater coupling of the specific negative behaviors reported above was related to family outcomes. In general, tighter coupling of the patterns observed in higher SES families was associated with better family relationship quality. Tighter coupling of greater adolescent anger and less parent validating behavior was associated with greater family cohesion (r = -.24, p < .05, parent report). That is, to the extent that adolescents expressed anger, if parents validated their behaviors less, families were reported to have greater cohesion.

Similarly, tighter coupling of adolescent demanding and parent validating behaviors was associated with greater family cohesion (r = -.27, p < .01), and marginally less family conflict (r = .18, p = .08), as reported by parents. Tighter coupling of adolescent validating and parent angry behaviors was associated with greater family cohesion (r = -.23, p < .05, parent report) and greater family expressiveness (r = -.20, p < .05, adolescent report). These results indicate that to the extent that negative behaviors in one family member are validated less often in the other family member, more positive family relationships are reported.

Tighter coupling with respect to the withdrawn behavior patterns found in lower SES families also was associated with better family outcomes. Tighter coupling of adolescent cheerful and parent withdrawn behaviors was associated with higher family cohesion (r = -.33, p < .01, parent report). Tighter coupling of adolescent warmth and parent withdrawn behaviors also was associated with lower levels of family conflict (r = .23, p < .05, adolescent report), and marginally higher levels of family cohesion (r = -.19, p < .06, parent report). These results indicate that to the extent that more withdrawn behaviors in one family member are associated with less cheerfulness/warmth from the other member, better family relationships are reported.

Finally we repeated all analyses above, but controlled for adolescent age, race, and gender, as well as parent gender. Patterns of significant and nonsignificant findings remained the same, indicating that the patterns reported above cannot be better accounted for by differences in age, race, or gender across families.

#### DISCUSSION

The present study demonstrated the importance of elucidating SES differences in parent–adolescent interaction patterns for understanding family relationship quality. Whereas higher SES families exhibited stronger reciprocity for negative behaviors (e.g., angry, demanding), lower SES families exhibited reciprocity for behaviors related to being withdrawn. Importantly, both types of reciprocity were associated with better family relationship quality. These findings suggest that SES differences provide insights into a more complex understanding of family relationships. That is, rather than assuming that high SES family interaction patterns are "good" and low SES ones are "bad," this study demonstrates that different types of interaction patterns are associated with positive family relationship characteristics in higher SES versus lower SES families. Thus a more complex picture involves understanding relationships within contexts; that is, how the adaptiveness of parent–adolescent interaction styles varies across SES contexts.

The reciprocity finding in higher SES families suggests that during the period of adolescence, these families are more responsive to negative behaviors. During adolescence, such synchrony may serve to help adolescents learn how to self-regulate complex new emotions, particularly around interpersonal relationships and conflicts, which may explain associations with better relationship quality. In contrast, the patterns within lower SES families suggest that they have a different version of synchrony centered around withdrawn behaviors. Given the multitude of demands and stressors in the lives of lower SES families, having times where one family member can be withdrawn and experience reduced positive affect from others may be beneficial in this context, and may explain associations with better relationship quality.

Limitations to the present study include the cross-sectional nature of the study, and the modest sample size. The correlational nature of the study makes directionality unclear; that is, family interaction patterns could shape family relationship quality, or relationship quality could determine interaction patterns. Although the correlational nature of our study does not allow for definitive conclusions, our study has some clinical implications. For example, our findings suggest the importance of focusing on synchrony around negative emotions as children transition from childhood to adolescence. In addition, it suggests that practitioners and policy makers should be cautious about promoting a single vision of ideal family interaction patterns. Rather, responsiveness to negative behaviors may occur differently for higher and lower SES families, and each may have its own value within the larger context of the socioeconomic background in which these families live.

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#### REFERENCES

- Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. Annual Review of Psychology, 53, 371–399.
- Bradley, R. H., Corwyn, R. F., Mcadoo, H. P., & Coll, C. G. (2001). The home environments of children in the United States part I: Variations by age, ethnicity, and poverty status. *Child Development*, 72, 1844–1867.
- Chu, L., & Powers, P. A. (1995). Synchrony in adolescence. Adolescence, 30, 453-461.
- Conger, R. D., Conger, K. J., Elder, G. H., Lorenz, F. O., Simons, R. L., & Whitbeck, L. B. (1992). A family process model of economic hardship and adjustment of early adolescent boys. *Child Development*, 63, 526–541.
- Deater-Deckard, K., & O'Connor, T. G. (2000). Parent–child mutuality in early childhood: Two behavioral genetic studies. *Developmental Psychology*, 36, 561–570.
- Dodge, K. A., Pettit, G. S., & Bates, J. E. (1994). Socialization mediators of the relation between socioeconomic status and child conduct problems. *Child Development*, 65, 649–665.

- Elder, G. H., Vannguyen, T., & Caspi, A. (1985). Linking family hardship to childrens lives. *Child Development*, 56, 361–375.
- Harrist, A. W., Pettit, G. S., Dodge, K. A., & Bates, J. E. (1994). Dyadic synchrony in motherchild interaction: Relation with children's subsequent kindergarten adjustment. *Family Relations*, 43, 417–424.
- Harrist, A. W., & Waugh, R. M. (2002). Dyadic synchrony: Its structure and function in children's development. *Developmental Review*, 22, 555–592.

Hollingshead, A. B. (1975). Four factor index of social status. New Haven, CT: Hollingshead.

- Luthar, S. S. (1994). Poverty and children's adjustment. Thousand Oaks, CA: Sage.
- McLoyd, V. C. (1990). The impact of economic hardship on black families and children: Psychological distress, parenting, and socioemotional development. *Child Development*, 61, 311–346.
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. American Psychologist, 53, 185–204.
- Mize, J., & Pettit, G. S. (1997). Mothers' social coaching, mother–child relationship style, and children's peer competence: Is the medium the message? *Child Development*, 68, 312–332.
- Moos, R., & Moos, B. (1981). Family environment scale manual. Palo Alto, CA: Consulting Psychologists Press.
- Paikoff, R. L., & Brooksgunn, J. (1991). Do parent child relationships change during puberty. Psychological Bulletin, 110, 47–66.
- Sampson, R. J., & Laub, J. H. (1994). Urban poverty and the family context of delinquency: A new look at structure and process in a classic study. *Child Development*, 65, 523–540.
- Smetana, J. G., Crean, H. F., & Daddis, C. (2002). Family processes and problem behaviors in middle-class African American adolescents. *Journal of Research on Adolescence*, 12, 275–304.
- Smith, T. W., Gallo, L. C., Goble, L., Ngu, L. Q., & Stark, K. A. (1998). Agency, communion, and cardiovascular reactivity during marital interaction. *Health Psychology*, 17, 537–545.
- Wakschlag, L. S., Chase-Lansdale, P. L., & Brooks-Gunn, J. (1991). Scale of Intergenerational Relationship Quality (SIRQ) manual. Chicago: Author.
- Wakschlag, L. S., Chase-Lansdale, P. L., & Brooks-Gunn, J. (1996). Not just "ghosts in the nursery": Contemporaneous intergenerational relationships and parenting in young African-American families. *Child Development*, 67, 2131–2147.

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