
The Effect of Father–Toddler and Mother–Toddler Role Reversal on the Development of Behavior Problems in Kindergarten

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Abstract

Role reversal is a relationship disturbance in which a parent looks to a child to meet a parent's need for comfort, parenting, intimacy or play, and the child attempts to meet these needs. The current study examined, within a developmental psychopathology framework, the effect of father and mother role reversal with toddlers on the development of attention problems, externalizing symptoms, internalizing symptoms, and social problems in kindergarten. In a normative sample, N = 57, role reversal was assessed in an observational paradigm, and teachers rated behavior problems. Father role reversal predicted attention problems and externalizing symptoms, whereas mother role reversal predicted social problems. Gender was an important moderator such that father role reversal predicted social problems for boys and mother role reversal predicted social problems for girls. The importance of a developmental psychopathology perspective, the role of fathers, and implications for the development of diagnosable disorders and for preventive interventions are discussed.

Keywords: development; behavior problems; role reversal; fathers

An understanding of risk factors for the development of psychopathology sheds light on normative development (Cicchetti, 1989; Rutter & Sroufe, 2000) and also informs atypical development and preventive interventions (Cicchetti & Toth, 1992). Multiple risk factors—individual, family, and the environment—may interact (Cummings, Davies & Campbell, 2000). Among these is a disturbance in parent–child relationships that may lead to failure in the negotiation of a child's successive developmental stages (Sroufe & Rutter, 1984). Failure to negotiate successive developmental stages may in turn result in the development of psychopathology (Freud, 1966).

The stage-salient issue in infancy is the development of a secure attachment, followed in the toddler period by the development of the self: autonomy/individuation,

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together with the ability to respond to parental control of impulses (Cicchetti, 1991; Mahler, Pine & Bergman, 1975). A disturbance in the parent–child relationship in the toddler period may lead to faulty self-development that, in turn, may make failure more likely in the negotiation of the stage-salient issues at ages 3 to 6 years, which are thought to be self-regulation, self-reliance/initiative, and peer relationships (Sroufe & Rutter, 1984).

Although a large body of work has examined the sequelae of attachment in infancy (Belsky & Cassidy, 1994; Thompson, 1999), less is known regarding the sequelae of self-development in the toddler period. The current study extends seminal work by Carlson, Jacobvitz, and Sroufe (1995), and Jacobvitz and Sroufe (1987) to examine a relationship disturbance in the toddler period, a role reversal between parent and child, and its effect on stage-salient issues in kindergarten: self-regulation (attention problems, externalizing symptoms), self-reliance/initiative (internalizing symptoms), and peer relationships (social problems) in kindergarten.

Definition of Role Reversal

The family ideally meets adult needs for intimacy and a child's need to be nurtured (Sroufe & Fleeson, 1988). The relationship between parents is a reciprocal partnership, and the relationship between parent and child is primarily unidirectional: the parent provides care, and the child receives it. The relationship between parents has been termed horizontal, and the parent–child relationship vertical (Hartup, 1986). However, if the child takes on significant aspects of the role of an adult and the parent takes on significant aspects of the role of the child in a role reversal, the parent–child relationship may become horizontal (Cox, Paley & Harter, 2001; Howes & Cicchetti, 1993).

Role reversal is defined as a relationship disturbance in which a parent meets adult needs for intimacy or unmet childhood needs for parenting, comfort or play in part with his or her child rather than with a spouse or another adult, and a child takes in part the role of parent, spouse, or peer in relationship to a parent (Kerig, 2003). The term 'role reversal' subsumes parentification (Boszormenyi-Nagy & Spark, 1973) and seductive caregiving (Sroufe & Ward, 1980). Role reversal is one aspect of boundary dissolution that also includes intrusiveness, overprotectiveness, and enmeshment (Jacobvitz, Morgan, Kretchmar & Morgan, 1991; Kerig, 2003), which are not assessed here.

Role reversal may be initiated either by the parent or by the child. A parent may expect a child to meet the parent's needs and abdicate from the parental role, or a child may try to meet the parent's needs in order to maintain proximity on the parent's terms despite not receiving comfort and protection from him or her (Cummings & Davies, 1994; Lyons-Ruth, Bronfman & Atwood, 1999). Role reversal is not an intermittent response limited to stressful situations but an enduring relationship disturbance.

Role reversal may adversely affect a child's self-development in the toddler period. The task for parents in the toddler period is to continue to provide a secure base from which the child may explore, not only to encourage autonomy/individuation but also to set limits to ensure both safety compliance with social mores (Ogawa, 2001; Sroufe & Rutter, 1984). This task may be especially challenging for a parent in a role reversal when he or she seeks to keep the child dependent in order to meet his or her needs rather than to foster autonomy/individuation (Howes & Cicchetti, 1993). Furthermore, a parent in a role reversal may feel too overwhelmed to set limits (Zeanah & Klitzke, 1991).

Empirical Work on Role Reversal

Prior research supports a relationship between role reversal and faulty self-development. Mothers engaged in role reversal with their toddlers were less likely to provide appropriate support, guidance, and limit setting (Sroufe & Ward, 1980). Moreover, college-age females who reported a role reversal with their parents also reported difficulty with identity development (Fullinwider-Bush & Jacobvitz, 1993). Furthermore, women with anorexia, thought to be linked to issues of parental control versus child autonomy (Minuchin, Rosman & Baker, 1978), reported more role reversal with both parents than did comparisons (Rowa, Kerig & Geller, 2001).

Although role reversal appears to be an important indicator of disturbance in the parent-child relationship, few studies have assessed how role reversal is related to children's social and emotional adjustment. In a notable exception, a prospective longitudinal study of at-risk mothers and their children, Sroufe and his colleagues examined a wide range of biological, personality, contextual, and caregiving variables as putative predictors of attention problems. Role reversal, as assessed in a series of mother-child teaching tasks in the preschool period, predicted attention problems both in kindergarten (Jacobvitz & Sroufe, 1987) and in the school years (Carlson *et al.*, 1995).

Limitations in the above studies include the assessment of role reversal in the preschool period rather than in the toddler period when it is hypothesized to affect self-development. Moreover, in an at-risk sample of mainly single mothers, it was not possible to assess fathers. Furthermore, outcome variables were limited to attention problems, although role reversal might also be expected to affect other aspects of self-regulation and other stage-salient issues of 3- to 6-year-olds (self-reliance/initiative and peer relationships). Finally, in predicting to attention problems in kindergarten, no gender breakdowns were provided (Jacobvitz & Sroufe, 1987).

The Current Study

The current study was designed to address the limitations mentioned earlier. We assessed role reversal in the toddler period, and we extended outcome variables from attention problems alone to include other behavior problems in kindergarten.

Self-regulation

Attention Problems. The expectation that the child meet his parent's needs may be overstimulating (Jacobvitz & Sroufe, 1987) and co-occur with a lack of dyadic support necessary for the development of self-regulation (Sroufe & Ward, 1980). Because attention problems reflect a problem with self-regulation (Douglas, 1988), we expected role reversal to predict attention problems as has been found previously (Carlson *et al.*, 1995; Jacobvitz & Sroufe, 1987).

Externalizing Symptoms. A lack of autonomy support and limit setting associated with role reversal may also have implications for the development of externalizing symptoms. Indeed, a lack of support for autonomy/individuation in the toddler period has been linked to the development of externalizing symptoms in preschool (Belsky, Woodworth & Crnic, 1996), and inadequate limit setting in early childhood contributes to the development of externalizing symptoms in middle childhood (Denham,

Workman, Cole, Weissbrod, Kendziora & Zahn-Waxler, 2000). We therefore predicted the development of externalizing symptoms from role reversal in addition to attention problems.

Self-reliance/Initiative

In a role reversal, problems with the development of autonomy/individuation may be accompanied by deficits in self-reliance/initiative, which may be reflected in symptoms of anxiety and depression. Moreover, a child may feel overwhelmed trying to meet a parent's needs, which may additionally make anxiety and depression more likely. Role reversal may therefore predict anxiety and depression, collectively termed 'internalizing symptoms'.

Peer Relationships

If a child is focused on trying to meet the parent's needs in a role reversal, and the parent seeks to keep him or her close in order to do this, the child may not gain competence in peer relationships, leading to the development of social problems. Role reversal may therefore lead to social problems.

Fathers

We also included role reversal with fathers in addition to role reversal with mothers. Many studies of parenting contributions to the development of psychopathology that examine girls as well as boys nonetheless fail to examine fathers as well as mothers (Crick & Zahn-Waxler, 2003). We therefore sampled fathers and mothers in a low-risk sample to better reflect the family-systems nature of role reversal (Cox & Paley, 1997).

Summary and Hypotheses

In the present study we tested a developmental psychopathology model for the effect of role reversal in the toddler period on the development of behavior problems in kindergarten. We predicted that problems with the stage-salient issue of self-development in the toddler period associated with role reversal would negatively impact negotiation of the stage-salient issues of self-regulation, self-efficacy/initiative, and peer relationships at ages 3 to 6 years. Specifically, we predicted that role reversal in the toddler period would lead to attention problems, externalizing symptoms, internalizing symptoms, and social problems in kindergarten. We also explored parent and child gender effects.

Method

Participants

Families were recruited from prenatal classes in a four-county rural area of the southeastern U.S.A. Data were collected on families before the birth of their first child, at 3 months, 12 months, 24 months, 60 months, and 70 months. Originally, there were 75 girls and 63 boys. For the current study a subsample of $n = 57$ (30 girls and 27 boys) in families with intact marriages were assessed at 24 months and at 70 months.

Demographics assessed prior to the birth of the child for the original full sample follow, with demographics for the current sample in parentheses. Fathers' average age

was 28 years 4 months (29 years 7 months), and mothers' average age was 26 years 1 month (26 years 8 months). Fathers had an average of 13 years 11 months (14 years 4 months) of education, and mothers had 13 years 10 months (14 years 4 months). Family income ranged from \$326 to \$2501 (\$493–\$2501) with an average of \$2450 (\$2501) per month. The sample, representative of the area, comprised 97% (98%) European-American and 3% (2%) African-American families.

Procedures and Measures

Role Reversal. When the child was 24 months old, each parent was videotaped separately with his or her child during a session lasting seven minutes. In half the families, mother preceded father, and in half father preceded mother. Each parent was given a different storybook that contained pictures but no words, and he or she was asked to: 'Read the story in a way that makes sense to you.' The storybooks were *A Boy, a Dog, a Frog, and a Friend*, by Mercer and Marianne Mayer, or *Frog on His Own*, by Mercer Mayer.

Role reversal was coded from both parent and child behavior during the session by using the Qualitative Ratings of Parent/Child Interaction at 24 months (Cox, 1997). The 7-point scale combined two scales developed by Sroufe, Jacobvitz, Mangelsdorf, DeAngelo, and Ward (1985) at the University of Minnesota. Role reversal is evident when the child takes the role of parent, peer, or spouse toward the parent. A score of 1 is given when the parent provides structure and support and sets limits as necessary. Physical affection is in response to the child's needs. A score of 7 is given when it is unclear who the child is and who the parent is throughout the session.

In a role reversal, the child may take charge of the session in a caretaking or controlling parental manner. For example, a girl picks up the book and pushes the mother over to the chair and hands the book to the mother for her to read it. The mother remains silent and passively submits to her daughter's direction. Or, a parent may engage the child as a playmate instead of providing needed structure and support. For example, a child ignores the father's attempt to read the book and races around the room screaming. The father puts the book down and joins the child in boisterous play without setting limits or returning to the book.

Interrater reliability was assessed for two coders using intraclass correlation coefficients (Winer, Brown & Michels, 1991). For role reversal with mother, reliability was assessed on 20% of the sample, $r_i = .85$. For role reversal with father, reliability was assessed on 15% of the sample, $r_i = .84$. Validity for the scale is provided in studies that employed the original scale to assess generational patterns of boundary dissolution and to predict attention problems (Carlson *et al.*, 1995; Jacobvitz & Sroufe, 1987; Sroufe *et al.*, 1985).

Behavior Problems. The child's teacher assessed behavior problems during kindergarten when the child was 5 years 10 months old. Teachers completed the Child Behavior Checklist/Teacher Report Form (CBCL/TRF) (Achenbach & Edelbrock, 1986; Edelbrock & Achenbach, 1984). The CBCL/TRF is a well-validated, well-normed inventory of child behavior consisting of 113 individual items, rated on a scale from 0 ('not true') to 2 ('very or often true'). The CBCL/TRF consists of almost entirely the same items as the original Child Behavior Checklist, the CBCL (Achenbach & Edelbrock, 1983), but is designed for use by teachers rather than by parents.

The CBCL/TRF generates behavior-problem composites made up of items found to co-occur for which T-score norms are calculated (Achenbach & Edelbrock, 1986).

We utilized T-scores for four of the behavior-problem composites: attention problems, externalizing symptoms, internalizing symptoms, and social problems. The following are examples of items included in each scale: (1) *attention problems*: 'inattentive', 'impulsive', 'cannot concentrate', and 'cannot sit still'; (2) *externalizing symptoms*: 'argues', 'defiant', 'fights', and 'disrupts'; (3) *internalizing symptoms*: 'withdrawn', 'stomach aches', 'fearful', and 'sad', and (4) *social problems*: 'not getting along with others', 'teased', 'not liked', and 'prefers to play with younger children'. Five percent of the sample reached the clinical cut-off of $T > 70$ with attention problems; 2% of the sample reached the clinical cut-off of $T > 70$ with social problems, internalizing symptoms, and externalizing symptoms.

Results

Descriptive Analyses

In order to decide if any variables should be controlled for, we conducted correlations between both the dependent and independent variables and demographic variables: parent (mean of husband plus wife) age, parent (mean of husband plus wife) education, and family (sum of husband plus wife) income. There was only one significant correlation, between attention problems and parent education. We therefore controlled for parent education in subsequent analyses. Table 1 shows sample sizes, means, and standard deviations for each variable for the sample as a whole and by child gender. Tables 2 and 3 display intercorrelations among variables in the sample as a whole and by child gender, respectively. In order to increase power when assessing interactions, one missing father role reversal score was imputed by using the mean value.

Preliminary Analyses

First, we tested whether role reversal differed as a function of the gender of child or parent. A 2 (Child Gender) \times 2 (Parent Gender) repeated measures ANOVA was conducted with parent as the within-subjects factor and child gender as the between-subjects factor. There was no main effect for parent, Wilks's lambda $F(1,55) = .02$,

Table 1. Descriptive Statistics for the Whole Sample and by Child Gender

Variables	<i>N</i>	<i>M</i>	<i>SD</i>
	(Girls, Boys)	(Girls, Boys)	(Girls, Boys)
Mother-toddler role reversal	57 (30, 27)	2.53 (2.40, 2.67)	1.68 (1.71, 1.66)
Father-toddler role reversal	57 (30, 27)	2.54 (2.37, 2.73)	1.53 (1.40, 1.68)
Attention problems	57 (30, 27)	52.98 (52.50, 53.52)	6.45 (6.75, 6.18)
Social problems	57 (30, 27)	53.56 (53.70, 53.41)	5.55 (4.87, 6.30)
Internalizing symptoms	57 (30, 27)	50.44 (50.30, 50.59)	8.72 (8.66, 8.95)
Externalizing symptoms	57 (30, 27)	49.86 (49.17, 50.63)	7.88 (6.86, 8.95)
Parent education	57 (30, 27)	14.37 (14.17, 14.59)	2.00 (2.12, 1.87)

Table 2. Intercorrelations Among Variables in the Whole Sample

Variables	1	2	3	4	5	6	7
Mother-toddler role reversal	—						
Father-toddler role reversal	.14	—					
Attention problems	.18	.35**	—				
Social problems	.33*	.21	.68***	—			
Internalizing symptoms	.10	.06	.50***	.62***	—		
Externalizing symptoms	.19	.45***	.58***	.59***	.34**	—	
Parent education	-.12	-.12	-.32*	-.23†	-.05	-.08	—

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3. Intercorrelations Among Variables by Child Gender

Variables	1	2	3	4	5	6	7
Mother-toddler role reversal		.19	-.01	.12	-.09	.17	-.36†
Father-toddler role reversal	.12		.51**	.49**	.24	.51**	.19
Attention problems	.30†	.17		.85***	.62**	.69***	-.39*
Social problems	.55**	-.16	.53**		.60**	.73***	-.42**
Internalizing symptoms	.18	-.14	.39*	.65***		.40*	-.21
Externalizing symptoms	.20	.35*	.45**	.36*	.25		-.34†
Parent education	-.27	-.20	-.28	-.008	.13	.15	

Note: Girls are below the diagonal; boys above the diagonal.

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

$p > .10$, nor for child gender, $F(1,55) = .93$, $p > .10$, nor for a parent by child gender interaction, Wilks's lambda $F(1,55) = .03$, $p > .10$. Role reversal in the toddler-parent dyad did not vary as a function of parent gender, child gender, or both.

Second, child gender differences for the four outcome measures were assessed. There were no gender differences in attention problems, $t(55) = .59$, $p > .10$, externalizing symptoms, $t(55) = .70$, $p > .10$, internalizing symptoms, $t(55) = .13$, $p > .10$, or social problems, $t(55) = .29$, $p > .10$. Thus, there were no significant differences

between girls and boys on their scores of attention problems, social problems, internalizing symptoms, or externalizing symptoms.

Regression Analyses

Collinearity among independent variables distorts the results of multiple regression analyses. Because when interaction terms are included, collinearity necessarily applies, we centered continuous independent variables to increase interpretability of the interactions (Aitken & West, 1991). We then computed interaction terms from the product of gender and centered continuous predictors. Hierarchical multiple regressions predicting attention problems, externalizing symptoms, internalizing symptoms, and social problems are presented in Tables 4–7.

Predicting to Attention Problems (Table 4). We tested the hypothesis that role reversal in the toddler period would predict attention problems in kindergarten with a multiple regression analysis. The total amount of variance in the dependent variable, attention problems, accounted for in the model was 26% (17% adjusted), $F(6,50) = 2.92, p = .01$. In step 1, parent education and child gender together accounted for 12% (9% adjusted) of the variance in attention problems. Results revealed a significant effect for parent education such that higher parent education predicted fewer attention problems.

In step 2, father–toddler and mother–toddler role reversal together accounted for an additional 8% (5% adjusted) of the variance in attention problems, which was marginally significant. Moreover, father–toddler, but not mother–toddler, role reversal made a significant, unique contribution to attention problems, $\beta = .28, p < .05$, such that increased father–toddler role reversal predicted increased attention problems in kindergarten. Role reversal thus predicted attention problems as hypothesized.

Table 4. Hierarchical Multiple Regression Analyses Predicting Attention Problems

Step	Independent Variables	ΔR^2	β	B	<i>t</i>	R^2 (adj.)	<i>F</i>	<i>df</i>
1	Parent education		-.34	-1.08	2.81*			
	Child gender	.12*	.12	1.48	.90	.12 (.09)	3.60*	2, 54
2	Parent education		-.27	-.86	2.01*			
	Child gender		.07	.91	.56			
	Father–toddler RR		.28	1.19	2.21*			
3	Mother–toddler RR	.08†	.05	.18	.36	.20 (.14)	3.22*	4, 52
	Parent education		-.28	-.91	2.17*			
3	Child gender		.05	.61	.38			
	Father–toddler RR		.11	.45	.57			
	Mother–toddler RR		.24	.90	1.39			
	Father RR × Child Gender		.25	1.27	1.32			
	Mother RR × Child Gender	.06	-.20	-1.55	1.66†	.26 (.17)	2.92*	6, 50

Note: adj., adjusted R^2 ; RR, role reversal.

† $p < .10$, * $p < .05$.

Table 5. Hierarchical Multiple Regression Analyses Predicting Externalizing Symptoms

Step	Independent Variables	ΔR^2	β	B	<i>t</i>	R^2 (adj.)	<i>F</i>	<i>df</i>
1	Parent education		-.09	-.34	.64			
	Child gender	.02	.10	1.61	.76	.02 (.02)	.45	2, 54
2	Parent education		.04	.14	.27			
	Child gender		.03	.44	.23			
	Father-toddler RR		.43	2.22	3.42**			
	Mother-toddler RR	.20**	.13	.62	1.03	.22 (.16)	3.67*	4, 52
3	Parent education		.05	.12	.22			
	Child gender		.03	.43	.22			
	Father-toddler RR		.32	1.66	1.69†			
	Mother-toddler RR		.15	.72	.89			
	Father RR × Child Gender		.15	.92	.76			
	Mother RR × Child Gender	.01	-.04	-.23	.21	.23 (.14)	2.48*	6, 50

Note: adj., adjusted R^2 ; RR, role reversal.
 † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 6. Hierarchical Multiple Regression Analyses Predicting Internalizing Symptoms

Step	Independent Variables	ΔR^2	β	B	<i>t</i>	R^2 (adj.)	<i>F</i>	<i>df</i>
1	Parent education		-.05	-.22	.37			
	Child gender	.00	.02	.39	.16	.00 (.00)	.08	2, 54
2	Parent education		-.02	-.00	.11			
	Child gender		.01	.12	.05			
	Father-toddler RR		.04	.25	.31			
	Mother-toddler RR	.01	.05	.28	.37	.01 (.00)	.16	4, 52
3	Parent education		-.04	-.13	.24			
	Child gender		.01	.35	.10			
	Father-toddler RR		-.20	-1.13	.96			
	Mother-toddler RR		.27	1.39	1.42			
	Father RR × child gender		.22	2.51	1.56			
	Mother RR × child gender	.08	-.28	-2.01	1.53	.09 (.00)	.83	6, 50

Note: adj., adjusted R^2 ; RR, role reversal.

Table 7. Hierarchical Multiple Regression Analyses Predicting Social Problems

Step	Independent Variables	ΔR^2	β	B	<i>t</i>	R^2 (adj.)	<i>F</i>	<i>df</i>
1	Parent education		-.23	-.63	1.69			
	Child gender	.05	-.23	-.63	1.69	.05 (.02)	1.45	2, 54
2	Parent education		-.11	-.31	.83			
	Child gender		-.06	-.61	.42			
	Father-toddler RR		.16	.57	1.19			
	Mother-toddler RR	.10*	.27	.88	2.02*	.15 (.09)	2.35†	4, 52
3	Parent education		-.14	-.39	1.13			
	Child gender		-.08	-.85	.64			
	Father-toddler RR		-.25	-.89	1.37			
	Mother-toddler RR		.49	1.62	3.03*			
	Father RR × Child Gender		.55	2.45	3.08**			
	Mother RR × Child Gender	.17**	-.34*	-1.53	2.12*	.32 (.24)	3.93**	6, 50

Note: adj., adjusted R^2 ; RR, role reversal.

† $p < .10$, * $p < .05$, ** $p < .01$.

In step 3, the interactions between child gender and role reversal did not account for significant additional variance in attention problems. However, there was a marginally significant interaction between mother-toddler role reversal and child gender. In plotting this interaction it was revealed that mother-toddler role reversal led to more attention problems with girls in kindergarten. Coefficients, variance accounted for, and significance tests are shown in Table 4.

Predicting to Externalizing Symptoms (Table 5). Next, we tested the hypothesis that role reversal in the toddler period would predict externalizing symptoms in kindergarten. The total amount of variance in the dependent variable, externalizing symptoms, accounted for in the model was 23% (14% adjusted), $F(6,50) = 2.48$, $p < .05$. In step 1, parent education and child gender did not account for a significant amount of variance in externalizing symptoms.

In step 2, father-toddler and mother-toddler role reversal together accounted for a significant additional 20% (16% adjusted) of the variance in externalizing symptoms. Furthermore, father-toddler, but not mother-toddler, role reversal made a significant, unique contribution to externalizing symptoms, $\beta = .43$, $p = .001$, such that greater role reversal observed among father-toddler dyads was associated with more externalizing symptoms as reported by kindergarten teachers. The hypothesis that role reversal would predict externalizing symptoms was thus supported.

In step 3, the interactions between child gender and role reversal were not significant, although the main effect for father-toddler role reversal remained marginally significant when the interaction terms were taken into account. Coefficients, variance accounted for, and significance tests are presented in Table 5.

Predicting to Internalizing Symptoms (Table 6). We then tested the hypothesis that role reversal in the toddler period would predict internalizing symptoms. The total amount of variance in the dependent variable, internalizing symptoms, accounted for in the model was only 9% (0% adjusted), $F(6,50) = .55, p > .10$. In step 1, parent education and child gender did not account for a significant amount of variance in internalizing symptoms.

In step 2, father–toddler and mother–toddler role reversal did not account for a significant amount of the variance in internalizing symptoms. Role reversal thus did not predict internalizing symptoms, contrary to prediction.

In step 3, the interactions between child gender and role reversal were not significant. (See Table 6 for coefficients, variance accounted for, and significance tests.)

Predicting to Social Problems (Table 7). Finally, we tested the hypothesis that role reversal in the toddler period would predict social problems in kindergarten. The total amount of variance in the dependent variable, social problems, accounted for in the model was 32% (24% adjusted), $F(6,50) = 3.93, p < .01$. In step 1, parent education and child gender together accounted for 4% (2% adjusted) in the variance of social problems.

In step 2, father–toddler and mother–toddler role reversal accounted for a significant additional 10% (7% adjusted) of the variance in social problems. Furthermore, mother–toddler, but not father–toddler, role reversal made a significant, unique contribution to social problems, $\beta = .28, p < .05$, such that more mother–toddler role reversal was associated with more social problems in kindergarten. The hypothesis that role reversal would predict social problems was therefore supported.

In step 3, interactions between child gender and role reversal accounted for a significant additional 17% (15% adjusted) in the variance of social problems. When interactions between role reversal and gender were added, there was still a significant effect for mother role reversal, $\beta = .49, p < .01$. Furthermore, significant interactions between role reversal and child gender emerged for both mother–toddler and father–toddler dyads. In plotting these interactions it was revealed that mothers' role reversal with girls and fathers' role reversal with boys predicted social problems. (See Table 7 for coefficients, variance accounted for, and significance tests.)

Discussion

This study examined the effect of role reversal between both parents and child in the toddler period on the development of psychopathology in kindergarten. Role reversal was assessed in an observational paradigm, and teachers assessed behavior problems. Father–toddler role reversal predicted externalizing symptoms and attention problems, and mother–toddler role reversal predicted social problems for boys and girls. Moreover, child gender moderated the relationship between role reversal and social problems such that mother–daughter and father–son role reversal predicted social problems.

Current Findings

Attention Problems. Father role reversal in the toddler period significantly predicted attention problems in kindergarten across child gender. With the role of fathers oriented toward play (Lamb, 1997), father role reversal may be likely to take the form

of father as a playmate. Moreover, the role of fathers is also to foster autonomy (Power & Shanks, 1989), which is thought to be necessary for the development of self-regulation (Sroufe & Rutter, 1984). However, by taking the role of playmate to the child, fathers may not provide the support necessary for the child to self-regulate, leading to the development of attention problems.

There was also a trend such that mother role reversal with girls predicted attention problems. With mothers' role as caretaker (Lamb, 1997), and the fostering of interpersonal relationships (Power & Shanks, 1989), mother role reversal with girls may take the form of daughter as caregiver. In trying to take care of her mother, a girl may not learn to focus on her own tasks. Indeed, Carlson *et al.* (1995) found that a maternal-caregiving composite that included role reversal predicted attention problems in girls but not in boys in elementary school.

Attention problems assessed with the CBCL, the teacher version of which was used in the current study, are associated with the diagnosis of attention-deficit-hyperactivity disorder (Jensen, Watanabe, Richters, Roper, Hibbs, Salzberg, *et al.*, 1996). Father role reversal may be a risk factor for the development of attention-deficit-hyperactivity disorder in both boys and girls, and mother role reversal may be a risk factor in girls.

Externalizing Symptoms. Father role reversal in the toddler period significantly predicted externalizing symptoms in kindergarten. Recent work suggests that children's *perceptions* of their parents' ability to contain them are negatively correlated with externalizing symptoms (Schneider, Cavell & Hughes, 2003). That is, independent of the quality of a parent's discipline strategies, if a child perceives the parent as powerless to enforce appropriate behavior, the child may display externalizing symptoms.

If a father is in a role-reversed playmate relationship, the normal vertical relationship between parent and child becomes horizontal (Hartup, 1986), and the child may *perceive* the father as powerless to contain him or her. Fathers may be especially important for the implementation of discipline strategies in families, a role that a father abrogates in a role reversal. Indeed, role reversal with fathers, but not mothers, was associated with behavior problems in a sample of children involved in custody battles (Johnston, Gonzalez & Campbell, 1987). Furthermore, externalizing symptoms assessed with the CBCL are associated with a diagnosis of conduct disorder (Edelbrock & Costello, 1988; Kazdin & Heidish, 1984).

Internalizing Symptoms. There was no effect for role reversal in the toddler period on the development of internalizing symptoms in kindergarten. Internalizing symptoms are more difficult to identify than externalizing symptoms (Jensen, Salzberg, Richters & Watanabe, 1993), especially in early childhood. Prior to being able to administer a self-report measure to assess internalizing symptoms, an adult observer measure of external behavior was utilized. The absence of a window on the child's own point of view may thus have contributed to these null findings. However, because role reversal is associated with depression and anxiety in college-age females (Jacobvitz & Bush, 1996), further research in early childhood is warranted.

Future research on role reversal and internalizing symptoms in young children may take advantage of a story-stem completion paradigm, the MacArthur Story Stem Battery (MSSB) (Bretherton, Oppenheim, Buchsbaum, Emde & the MacArthur Narrative Group, 1990). The MSSB has been successfully utilized with children aged

3 to 6 years to access their internal worlds (Macfie *et al.*, 1999; Macfie, Cicchetti & Toth, 2001; Oppenheim, Nir, Warren & Emde, 1997; Toth, Cicchetti, Macfie & Emde, 1997) and to predict to behavior problems (Toth, Cicchetti, Macfie, Rogosch & Maughan, 2000; Zahn-Waxler, Schmitz, Fulker, Robinson & Emde, 1996).

Social Problems. Mother role reversal in the toddler period predicted social problems in kindergarten. A mother's role of maintaining a close caretaking relationship with her children (Lamb, 1997) and focusing on inculcating interpersonal skills (Power & Shanks, 1989) may be disrupted in role reversal. In role reversal the mother may be focused more on the child's meeting her needs than on teaching interpersonal skills.

Moreover, child gender moderated the relationship between role reversal and social problems such that mother role reversal was associated with social problems in girls, and father role reversal was associated with social problems in boys. Children's interactions with peers become increasingly gender-segregated during the preschool and early school years (Maccoby, 1990, 1998). Girls' play interactions tend to be collaborative and affiliative, whereas boys tend to engage in competitive and rough-and-tumble types of activities (Leaper, 1994; Maccoby, 1990, 1998).

Furthermore, when interacting with their infants and toddlers, mothers tend to engage in more verbal and toy-mediated types of play, whereas fathers engage in more physically stimulating play (Parke, 1996; Parke & Tinsley, 1987). Importantly, more frequent physical play with fathers has been associated with greater peer acceptance and social competence, especially among boys (MacDonald, 1987; MacDonald & Parke, 1984). Also, fathers' physical play appears to peak when their children are approximately 2 years of age (MacDonald & Parke, 1986).

Taken together, we speculate that a role reversal with the same-sex parent may interfere with learning and practicing interactive skills that might be important for establishing effective interactions with same-sex peers. Future research examining the interactive processes through which role reversal might be related to children's problematic peer experiences is needed. Finally, social problems assessed with the CBCL are associated with oppositional defiant disorder (Kasius, Ferdinand, vandenBerg & Verhulst, 1997). One pathway to oppositional defiant disorder may lie in limited competence with peers stemming from role reversal.

Importance of These Findings

These findings are important because, for the first time, the effect of father role reversal as well as mother role reversal is examined. Fathers' emotional availability and responsiveness to a child's needs have been identified as factors in the prevention of psychopathology (Silverstein, 2002) and in the development of children's self-regulation and social competence (Cabrera, Tamis-LeMonda, Bradley, Hofferth & Lamb, 2000). Father role reversal may be one instance of a lack of responsiveness and emotional availability that fosters problems with both self-regulation and social competence.

These findings are also important because they may inform interventions. Preventive interventions for parents might be aimed at helping parents understand the importance of getting their adult needs and unmet childhood needs met by other adults or a therapist, but not by their young child. Although increasing adult-like responsibility such as caring for younger siblings may be appropriate with a child's increasing maturity (Jacobvitz, Riggs & Johnson, 1999), the expectation of responsibilities for their

parents at extremely young ages appears to be detrimental. Even though such children may look mature for their years, they may actually be missing important milestones.

The current study is important because it underscores the value of a developmental psychopathology framework in assessing the effect of success/failure at one stage-salient issue of development on the next. We found that role reversal, a disruption in self-development in the toddler period, led to problems with self-regulation and peer relationships, stage-salient issues in kindergarten.

In terms of prior development, disorganized attachment predicts role reversal of either a caretaking or coercive nature at age 6 years (Main, Kaplan & Cassidy, 1985). Thus, a child unable to form an organized attachment to his or her parent may find some security in taking a parental role toward the parent. However, more needs to be known regarding the effect of role reversal on stage-salient issues following kindergarten. How does role reversal affect school functioning? One study found that lack of 'balance' in the parent-child relationship, with balance defined as an equal ratio of parent-to-child initiatives for interaction, led to a child's being judged by both peers and teachers to lack both social and academic competence in school (Baldwin *et al.*, 1982).

Caveats

One limitation of the current study is that we did not examine subtypes of role reversal. Thus, disparate subtypes such as caretaker and playmate relationships were collapsed into one category. Future examination of these subtypes may be informative. Also, in terms of the role-reversal construct, further validation of the role-reversal scale used here with other measures of role reversal is desirable.

Another limitation of the study is that, in examining behavior problems in a normative sample, clinical levels of behavior problems were rare. These results are valuable in suggesting that attention-deficit-hyperactivity disorder, conduct disorder, and oppositional defiant disorder may be related to role reversal, but actual diagnoses in clinical samples are needed to confirm this.

Moreover, although sampling from a normative population made it possible to study fathers, it is not clear how these results generalize to families in which the father is not living at home, or in which nonbiological father figures play a major role in children's lives, or in which fathers are only peripherally involved as in many high-risk populations. Including fathers and understanding their influence on child development remains a challenge for future research.

Finally, role reversal is just one of multiple interacting factors that make the development of behavior problems more likely. The current study did not attempt to measure these other factors but instead focused on one, role reversal, which has received little attention thus far. Ideally, role reversal would be assessed together with these other factors and interactions among them in order to identify underlying processes.

In conclusion, role reversal represents a serious yet not uncommon risk factor for the development of children's behavior problems. Role reversal is a problem not only in at-risk samples (Cummings, Hennessy, Rabideau & Cicchetti, 1994; Dean, Malik, Richards & Stringer, 1986; Macfie *et al.*, 1999), but also in normative samples (Main *et al.*, 1985) and one that deserves further research. Furthermore, because role reversal tends to be transmitted intergenerationally (Jacobvitz, Hazen, Feldman & Steffek, 2003; Jacobvitz *et al.*, 1991; Macfie, McElwain, Houts & Cox, 2005), interventions

addressed at normalizing child–parent relationships need to be instituted as early as possible. In this way, cascading effects on future development and on future generations may be averted.

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