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A Time Varying Evaluation of Identity Theory and Father Involvement for Full Custody, Shared Custody, and No Custody Divorced Fathers

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Abstract

This study tested identity theory models of father involvement for 230 divorced fathers of young children aged 4 to 11 followed over 18 months. Research questions were (1) Do measures of identity salience and centrality of the fathering role predict fathering involvement over time? (2) Does father involvement predict fathering identity over time? (3) Does father custody moderate these relationships? Involvement was assessed as contact frequency, number of father-child activities, and positive involvement observed during father-child interaction. Comparisons showed that the quantity of involvement differed by custody but there were few differences in the quality of involvement. Fathers did not exhibit significant mean decreases in involvement and custodial groups did not differ in the growth rates for involvement nor identity measures. However, there were significant individual differences in growth rates, meaning there was variance in fathers increasing and decreasing in measures over time. Time 1 father identities, measured as salience and centrality, predicted days per month, overnights per month, and father child activities over time. Time-varying predictors suggested that identities were more predictive of growth in involvement than *vice versa* although father involvement predicted salience and primarily centrality. Implications for practice and future research are discussed.

Keywords

father involvement; identity salience; centrality; custody; growth modeling

National estimates of contact by nonresident fathers (divorced and never married) have ranged from 18–20% in the early 1980s (Furstenberg, Nord, Peterson, & Zill, 1983; Seltzer & Bianchi, 1988) to a range of 24–38% in the late 1980s to the mid 1990s (Amato & Sobolewski, 2004; Stephens, 1996). Separated, divorced and never married fathers are also gaining more custody than in the past (Hofferth, Stueve, Pleck, Bianchi, & Sayer, 2002). At the same time, however, studies also have shown that fathers exhibit decreases in noncustodial parenting in time following divorce (Arendell, 1995). The quality and amount of contact varies. Fathering roles may increase in importance following marital separation with some divorced fathers becoming more involved with their children; while for others, factors such as increased role strains, ambiguities over parenting and conflict with the former spouse may contribute to decreases in father contact (Braver et al., 1993; Stephens, 1996). Historically, therefore, more divorced fathers are becoming involved than in the past but also tend to withdraw from parenting responsibilities over time.

This is unfortunate as studies have demonstrated that quality father involvement following divorce matters in the lives of children and it benefits not only children but mothers and fathers as well (Amato & Gilbreth, 1999; Aquilino, 2006; Simons, Whitbeck, Beaman, & Conger, 1994). As a result, policy makers have been interested in factors influencing fathers' involvement in their children's lives following divorce, primarily focusing on shared custody and noncustodial fathers (Braver, Griffin, & Cookston, 2005; Lamb, 2002). The present study examines involvement including full custody divorced fathers, a relatively understudied group.

Among theoretical perspectives that have garnered attention to explain variation in father involvement has been related identity and role-identity theories for understanding resident fathers (Rane & McBride, 2000), divorced part-time and nonresident fathers (Fox & Bruce, 2001; Madden-Derdich & Leonard, 2000; Minton & Pasley, 1996). Simply stated, identity theories posit that the more a father identifies with the father role and the more important or central it is to his self-conception, the more involved he will be with his children (Ihinger-Tallman, Pasley, & Bueler, 1995). Although identity theory has been evaluated, there remain few longitudinal investigations. Testing hypotheses from identity theory, this report focuses on the time varying identity measures as predictors of fathering involvement for a sample of divorced fathers including full custody and no custody nonresident fathers followed over 18 months.

Because father involvement tends to decline following divorce, this study asks three basic questions employing a symbolic interactionist perspective. Controlling for key theoretical covariates of involvement: Do fathers with stronger fathering identities or increasing fathering identity predict growth in father involvement over time? Does fathering involvement over time in turn predict changes in fathering identities? And do these relations vary as a function of physical custody status?

Symbolic Interaction, Identity Theory, and Father Involvement

Role theory from a symbolic interactionist perspective states that social roles are symbols associated with positions in society that provide norms for behavior. Attached to these roles are identities, the self-conceptions of a person's position in the social structure based on enduring, normative, and reciprocal relationships with other people (LaRossa & Reitzes 1993; Stryker, 1968; 1987). In short, people acquire meanings for definitions of self (i.e., identities) through social interaction (Burke, 1991; Burke & Reitzes, 1991; McCall & Simmons, 1966).

Because an individual can hold multiple role identities at one time (e.g., father, husband, scout leader, musician), another primary assertion is that multiple identities must be organized hierarchically, and the ranking in order of importance is considered identity salience "...multiple identities are likely to be organized in a salience hierarchy. 'Salience' refers here to the subjective importance that a person attaches to each identity, similar to the concepts of 'psychological centrality' (Rosenberg, 1979) and 'prominence' (McCall & Simmons, 1966)" (Thoits, p.237, 1992). For centrality, those identities that are highly valued or that are more central to how we see ourselves, are the ones more likely to guide our behavior and impact our general sense of self and well-being (Rosenberg, 1979).

Although Stryker first defined the concept of salience in 1968 as the as "the probability of a given identity being invoked across a variety of situations", Stryker and Serpe (1994) also recognized that many researchers have used measures of ranked comparison of roles for defining salience, "...some scholars who use the concept of salience as defined by Stryker nevertheless have operationalized the concept via rankings of importance (e.g., Hoelter, 1983; Serpe, 1987; Serpe & Stryker, 1987; Thoits, 1992), and some (e.g., Callero, 1985) use a measure incorporating both salience and centrality" (Stryker & Serpe, p.19, 1994). In the present study

two measures of fathering role identities defined relative importance of fathering; *father salience* measured via ranked comparisons of roles and *father centrality* measured as the rated importance of the fathering role.

Residential status, marital status, and physical custody status are all social contexts that directly affect involvement because they provide structured access and resources for time, socialization, and activities with children (Bauserman, 2002; Pleck, 1997; Seltzer, Schaeffer, & Charng, 1989) and are likely to impact the relations among identity concepts and father involvement. Some research has supported these notions; however, findings are also mixed.

Operationalized as centrality, Rane and McBride (2000) employed a penny sort task comparing various roles for resident married fathers (e.g., spouse, worker, father) and found that fathers higher in centrality were higher in behavioral engagement and responsibility with their children relative to fathers lower in centrality. Using father ratings of involvement in child-related activities, Henley and Pasley (2005) found that measures of identity investment and role satisfaction were associated with higher levels of involvement for married and divorced fathers. Further, marital status moderated the effect. That is, coparenting relationship quality was a stronger predictor of identity and involvement for divorced fathers. Similar findings were found by Minton and Pasley (1996) showing that fathering identity predicted involvement and effects of perceived fathering competence were stronger for divorced fathers. In a comparison of divorced nonresidential fathers with married fathers, Minton and Pasley (1996) found that nonresidential fathers reported feeling less competent but had a higher fathering identity salience, with higher identity predicting more involvement. In both of those studies, however, measures of identity salience were not predictive of involvement.

Contrary to these findings, another study employing a county representative sample of resident and nonresident fathers, Fox and Bruce (2001) found that identity salience predicted a composite measure of fathering including behavioral engagement, affective involvement, and responsivity. For separate indicators, identity salience predicted the degree fathers engaged children in particular activities and responsive nurturant parenting. Their measure was a Likert-type scale rating the priority of the father role. Although each of the above studies employed differing measures of salience or centrality, the findings underscored the relevance of identity constructs and their potential influence on involvement.

Each of the studies discussed directly above were crosssectional. The present longitudinal study attempts to advance prior evaluations in several ways. One, father involvement is conceptualized as the amount of contact per month, the number of father-child activities, and quality of father's positive involvement during parenting interaction tasks using father report and direct observation. Studies of involvement for divorced fathers have historically focused on the amount of contact or child support and less so on behaviors or activities. Studies have also relied on single sources of data (Day & Lamb, 2004; Parke et al., 2004). Two, although research on consequences of divorce has focused on younger and older children, research on father involvement has focused mainly on the period of adolescence or young adulthood for divorced families (Aquilino, 2006; Coley & Medeiros, 2007; King & Sobolewski, 2006) and less so on younger children, a group more vulnerable to effects of divorce (Hetherington & Clingempeel, 1992). Three, comparative studies have mainly compared married fathers with nonresident fathers, the present study examines variation within divorced fathers contrasting full custody, shared and no custody fathers over time.

Research Questions and Hypotheses

Using a symbolic interaction perspective, three basic questions are addressed formulating study hypotheses:

(1) *Do fathers with stronger fathering identities or increasing fathering identity predict growth in father involvement over time?*

Hypothesis 1: Controlling for custody status, fathers higher in identity salience and centrality will have higher levels of involvement. Similarly, increases in fathering identity measures will be associated with increases in father involvement.

(2) *Does fathering involvement over time in turn predict changes in fathering identities?*

Hypothesis 2: Although process theories posit that identities are relatively stable and reinforced by social interaction, they are malleable (Burke, 1991; Thoits, 1992). Therefore, it is expected that father involvement, in turn, will predict father identity over time.

(3) *Do these relations vary as a function of physical custody status?*

Hypothesis 3: Based on studies above, father salience and centrality effects on involvement are expected to be stronger for shared and no custody fathers.

Method

Sample Participants

Participants were 230 divorced fathers from the *Oregon Divorced Father Study* (ODFS). Fathers were recruited from a large metropolitan county in Pacific Northwest via public court records. Fathers with children between the ages of 4 and 11 years, and a divorce decree date occurring within 24 months from the time of recruitment were eligible. Fathers were asked to participate in the study through letters describing the nature of the project and full explanation of study activities. Court records were screened for children within the targeted age range. One hundred eighty (78%) of the fathers invited to participate chose to and were able to enroll the focal child. The mean age of the participating focal child was 7.65 years ($SD=1.98$). Forty-seven percent were girls and 53% were boys.

Father's age ranged from 22.9 to 63.4 years ($M = 37.8$, $SD = 7.7$), fathers' median annual income was \$28,400 measured in ordinal categories ranging from 1 (<\$5,000) to 10 (>\$100,000) with a ($M = 5.4$, $SD = 2.2$). Fathers' education was measured in categories ranging from 1 (< than 8th grade) to 13 (advanced doctorate) with a median of "some college, less than 2 years but not associates degree" ($M = 7.2$, $SD = 2.9$). Thirteen percent of fathers self-identified as racial-ethnic minorities and 17% identified their children as minorities.

In the present analyses the ODFS was comprised of 46 (20%) residential fathers with full custody, 114 (50%) part-time residential fathers with shared physical custody and residence of children, and 70 (30%) nonresidential fathers. Sample weights were obtained by procedures to correct for over- or under-sampling based on the court-defined legal custody status of participants and nonparticipants (details provided in DeGarmo, Patras, & Eap, 2008). Data were obtained from paper and pencil questionnaires, face-to-face interviews, self-administered computer questionnaires, and observational coding of structured father-child interaction tasks.

Longitudinal data were collected at three waves: Baseline (Time 1), a 9-month follow up (Time 2), and an 18-month follow up (Time 3). Retention rates for were 84% and 82% respectively for T2 and T3 with no differential rates of attrition ($n= 83\%$, 84% , and 77% , respectively for full, shared, and no custody fathers). Each center visit took approximately 2.5 hours. All participants were provided childcare, transportation, and a meal if requested (delivered local take out). Father and child were each paid approx. \$25 an hour for their time. All of the fathers participating in the study provided self-report measures of father involvement. For the observational measures of father involvement, of the 180 fathers enrolling children in the study,

data were obtained from 43 residential fathers (93%), 107 part-time residential fathers (94%), and 30 nonresidential fathers (43%).

Measures

Father Involvement

Father involvement was measured with four indicators, three father-reported measures and one observation-based measure. The first two measures were the *Number of weekdays or weekend days* per month for contacts or visits during the regular school year and the *Number of overnight visits* (adapted from Braver et al., 1993). The third father-report measure was the *Family Activities Checklist* (Patterson, 1982), an index of 28 common parent-child activities for the last 2 months (e.g., play indoor games, eat together, go for a walk, see a movie, etc.).

The fourth indicator was an observation-based scale rated by trained coders scoring the father-child interaction tasks. Observational data were obtained from a total of 24 minutes of videotaped interaction rated across 4 structured interaction tasks during the father-child visit: a refreshment task lasting 5 min.; a problem-solving discussion focusing on a parenting issue lasting 7 min.; a play task with the father lasting 7 min.; and an academically challenging teaching task lasting 5 min. The refreshment task was a “warm up” in which father and child were provided refreshments and were asked to take a break from interviews and questionnaires. The problem-solving discussions focused on father-selected topics from a checklist of common parent-child issues. They were asked to resolve issues rated as “hottest.” In the teaching task, fathers were asked to work with the child on a typical homework problem. Children were provided a homework problem that was one grade level beyond the child’s current grade.

Fathers’ Positive Involvement was a 12-item Likert-type scale rated from *Very Untrue* to *Very True* scored after each interaction task. Some items were rated on a 5-point scale and some on a 7-point scale. All items were rescaled from 1 to 7 and averaged. Sample items were “treated child with respect, was affectionate with child, maintained good eye contact and interactive posture, was cooperative, was involved, was accepting of child” ($\alpha = .94, .96, \text{ and } .95$, respectively). Inter-rater reliability ICCs ranged from .57 to .71 for the positive involvement scale over time. Fifteen percent of videotapes were randomly selected for blind reliability checks of the trained Family Peer and Process coders (FFP: Stubbs, Crosby, Forgatch, & Capaldi, 1998). Cohen’s Kappa, an indicator of coder agreement above chance, was .79 for content (87% agreement) and .80 for affect (95% coder agreement).

Father Identity Salience and Centrality

Both of these related identity measures assess the relative importance of the fathering role for individuals. One focuses on a ranked comparison and the other on the rated importance or priority the role holds. *Identity Salience* was measured from the Parental Identity Questionnaire (PIQ: DeGarmo & Forgatch, 2002), which obtains an index ranking score from two sections of paired comparisons of role identities (e.g., parent, employee, friend, partner). The first section reads, “Thinking about social roles that you are involved in, compare each pair below. Shade the circle that best answers the statement ‘I define myself as more a ____ than I define myself as a ____.’ ” Each role identity was then totaled for the number of times it was answered first in a comparison. In the second section, respondents were asked to “... think about meeting people for the first time... if you were to think about meeting a new roommate, what would you tell them about yourself first?second? and so on.” Fathers ranked their roles from first to last for: (1) telling a news reporter about yourself, (2) meeting someone new at work, (3) meeting a friend of a close friend, and (4) meeting someone at a party. Both sums were rescaled to a common metric of 0 to 1 and averaged ($\alpha = .69, .73, \text{ and } .72$, respectively over time).

Father Centrality was a composite of two previously validated scales (Fox & Bruce, 2001). The first was a 5-item subscale for weighting reflected appraisals. It is used here to rate the importance or centrality of the fathering role. Using a scale of 1 (*not at all important*) to 5 (*very important*) fathers responded to the question, “How important are these people’s opinions of you as a father? (your children, children’s mother, your parents, coworkers, friends).” The second scale, although labeled salience by Fox and Bruce was not a forced choice ranked comparison but more a rating of the degree of importance. Therefore, it was operationalized as centrality in the present study. Nine items were rated from (1) *strongly agree* to (5) *strongly disagree* (e.g., *I enjoy volunteering in my kids’ activities, like sports or scouts, I like being known as a father, I want people to know I have children, I would rather work overtime than watch my kids, etc.*). All items were recoded where necessary to reflect the importance of fathering ($\alpha = .60, .59$, and $.62$, respectively over time).

Control Variables

Several theoretical covariates were included as controls. These were socioeconomic resources (SES), conflict with the former spouse, child age and sex, and fathers’ age. *Age of the father* and *age of the child* measured in years, *sex of the child* coded as 0 (*female*) and 1 (*male*).

SES included education, income, and occupational prestige. *Fathers’ education* was measured with years of schooling completed, categories ranging from 1 (< 8th Grade) to 13 (*Post-graduate Training*) for number of school years completed. *Fathers’ Income* was measured by annual categories ranging from 1 (*Less than \$5,000*) to 10 (*More than \$100,000*). *Occupation Prestige* was measured using the Hollingshead Four Factor Index of Social Status (Hollingshead, 1975). Occupation categories ranged from 1 (*Menial Unskilled Laborer*) to 9 (*Major Professional, Executive Large Business Owner*). Each of these scores were standardized and averaged ($\alpha = .69$).

Conflict with the former spouse was included as a time-varying control based on a maternal gatekeeping perspective (De Luccie, 1995; Madden-Derdich & Leonard, 2000) suggesting that mothers can influence fathers’ participation with children both before and particularly after divorce. *Ex-Spousal Conflict* was a composite score of two subscales adapted from Braver et al. (1993). *General Conflict* was an 8-item scale of the amount of conflict and child exposure rated on a 3-point scale from *True* to *False* (e.g., child never sees my ex-wife and me arguing; knows that my ex-wife and I argue or disagree a lot; ex-wife and I are often mean to each other when child is around; often sees arguing; etc., $\alpha = .83$). *Co-parenting Conflict* was 5 items measuring conflict associated with co-parenting or shared custody relationships rated from 1 (*Didn’t Happen*) to 5 (*Happened Very Often*). Sample items were: “argued about moral values related to raising child; discipline practices; activities done with child, e.g., watching TV, selecting movies, wearing bicycle helmets, etc.; scheduling pick-up and drop-off times and locations” ($\alpha = .83, .85$, and $.83$ over time). The scores were rescaled to a common metric, a continuous ratio scale of 0 to 1 and averaged.

Analytic Strategy

Analyses were conducted in three steps. First, missingness and sample attrition were evaluated for potential bias due to fathers lost at follow up. Second, descriptive data and custody contrasts were provided for key study variables over time. Third, time varying hypotheses were tested using three wave hierarchical linear growth models (HLM: Raudenbush & Bryk, 2002). HLM is a multilevel regression framework also known as mixed modeling. The models are hierarchical because growth outcomes are time-varying repeated measures nested or clustered within individuals. The study design scheduled one 9-mo. follow up from baseline (.75 years) and an 18-mo. follow up (1.50 years). Ideally, all fathers would be assessed exactly at .75 and 1.5 year intervals; however, some fathers were more difficult to schedule over time for lab

visits. The resulting mean time to the scheduled 9-mo. follow up 1 was .84 ($SD = .13$) and was 1.44 mos. ($SD = .38$) for the 18-mo. follow up. Therefore, the sample was assessed on the average as planned, however, fathers varied in the actual time between assessments. HLM also provides the advantage of estimating growth based on each individual's actual assessment timeline. A growth rate for a more difficult to assess father can be modeled for delayed or sporadic assessment (e.g., baseline, 10.3-mo., and 23.2-mo. follow ups compared with a father as intended at baseline, 9 mos., and 18 mos.). Thus HLM more reliably estimates the rate of change using accurate individual time intervals.

More specifically, we specified models using methods outlined by Singer and Willett (2003) for specifying time varying outcomes and entering time-varying covariates. All models are regression models predicting average levels of involvement over time as well as growth or change in involvement. For the custody-conditioned growth model, the two-level mixed model was 3 repeated measures nested within fathers specified as

$$\begin{aligned} \text{Involvement}_i = & \pi_{0i} + \pi_{1i}(\text{Time}) \\ & + \pi_{2i}(\text{Shared Custody}) \\ & + \pi_{3i}(\text{No Custody}) \\ & + \pi_{4i}(\text{Shared Custody} \\ & \times \text{Time}) \\ & + \pi_{5i}(\text{No Custody} \times \text{Time}) + r_{ti} \end{aligned}$$

where the dependent variable for father i is repeated over the three waves to estimate π_{0i} as the "time centered average level" intercept. When time is centered for linear growth, the intercept is interpreted as the average levels across time as opposed to initial status (see Biensanz, Deeb-Sossa, Papadakis, Bollen, & Curran, 2004). In this case the intercept π_{0i} is the average levels for full custody fathers because they become the comparison group when shared and no custody fathers are entered as dummy coded contrasts. Similarly, the π_{1i} Time parameter is the growth rate for full custody fathers. π_{2i} is the shared custody intercept relative to full custody fathers and π_{4i} (Shared Custody $\times$ Time) the shared custody growth relative to full custody fathers.

For the prediction models, variables were entered in theoretical blocks known as hierarchical entry (Cohen, Cohen, West, & Aiken, 2003) and evaluated for model improvement. To address the study hypotheses, control variables and Time 1 variables were entered first. For example, these were the baseline levels of father identity predicting average levels of involvement. Second, time-varying predictors were entered. Estimands for time-varying covariates are an average effect for either a random or fixed effect controlling for other variables in the model (Singer & Willett, 2003). For identity measures, these were the effects of average salience and centrality predicting average levels of involvement. Third, time $\times$ time-varying predictors were entered. These variables represented the effects of change in identity on change in involvement or the time by identity interactions, also denoted as delta (Δ). The mixed model equation representing these effects is

$$\text{Involvement}_i = \pi_{0i} + \pi_{1i}(\text{Time}) + \pi_{2i}(\text{Controls}) + \pi_{3i}(\text{Father Identity}) + \pi_{4i}(\text{Time} \times \text{Father Identity}) + u_{0i} + u_{1i}(\text{Time}) + r_{ti}$$

where π_{0i} is the conditional average level, π_{1i} Time is the conditional growth rate, π_{3i} Father Identity is the time varying average effect of father identity, and π_{4i} Time $\times$ Father Identity is the effect of change in identity also represented as the effect of Δ Father Identity. Like the first

example above, the final set of analyses address the question of whether effects are moderated by custody status by entering dummy coded contrasts by predictor interactions.

Results

Attrition analyses were conducted comparing 82% of the sample retained at Time 3 with the fathers lost to follow up. Results indicated that there were no significant differences between fathers' remaining in the study at Time 3 compared with fathers lost to follow up on any of the predictor variables or outcome measures of father involvement with the exception of a marginal difference fathers' report of father-child activities ($M = 16.70$, $SD = 4.25$ for fathers lost to follow up and $M = 17.84$, $SD = 3.35$ for fathers retained, $t = 1.83$, $p < .10$). Second, a missing values analysis was conducted on the dependent variables and all the predictor variables entered in the models. Results showed the data were missing completely at random (MCAR) (Little's MCAR test $\chi^2(372) = 392.829$, $DF = 372$, $Sig. = .219$). Because data were MCAR, full information maximum likelihood (FIML) estimation was warranted. HLM can model Level 1 time varying missing data with FIML. Data must be nonmissing for Level 2 fixed effects (e.g., SES, age, T1 conflict, etc.). Therefore, multiply imputed (MI) data using 25 Bayesian (MI) data sets were used for any nonresponse missingness at Level 2 (Jeličić, Phelps, & Lerner, 2009).

Longitudinal Patterns of Father Involvement and Father Identity

The descriptive means and standard deviations are provided in Table 1 by custody over time. Comparisons were conducted using one-way analysis of variance models with Bonferroni contrasts. Although fathers differed in their amount of contact, the quality and number of activities exhibited fewer differences. For the amount of contact measured as days and overnights per month, fathers differed in frequency of contact as expected according to custody. For the number of father-child activities, there were fewer differences with a marginally significant contrast indicating shared custody fathers reported more activities with their children than no custody fathers at each respective time point. They did not differ from full custody fathers. Similarly, there were no two-tailed significant differences in observed positive involvement. However, shared custody fathers were rated more positive than full custody fathers at Times 1 and 2 but not at Time 3. For the identity, no differences were obtained for father salience with the exception of shared custody fathers at Time 2 ranking the fathering role higher than no custody fathers. In contrast, the centrality measure was significantly higher for shared custody fathers at each time point compared with full custody and no custody fathers.

Growth Pattern Contrasts by Custody Status

Growth models were specified next to examine the change patterns over time by custody. Means and variance components for study variables are shown in Table 2. The average level intercepts and growth rates are estimands for full custody fathers with shared and no custody comparisons to full custody fathers shown in the rows directly below. Results showed the amount of involvement differed on average by custody status as did the crosssectional means but there were few differences in the quality of father involvement by custody with the exception of shared custody fathers being rated higher in observed positive involvement. Surprisingly, there were no significant two-tailed differences in the growth rates for involvement indicators, nor identity measures. With the exception of growth in positive involvement, every variable obtained significant individual variation in levels and growth rates.

Starting with days per month, shared custody fathers averaged 8.44 fewer days per month and no custody fathers averaged 13.91 fewer days relative to full custody fathers. The variance component indicated there were significant individual differences in the intercepts over time. The mean growth rate was not significantly different from zero for full custody fathers. Shared

custody fathers showed a marginal increase relative to fathers ($\beta_{01} = 2.12, p < .10$) and the growth rate for no custody fathers did not differ. A similar pattern was obtained for overnights per month. Both shared and no custody fathers averaged lower levels relative to full custody fathers but full custody fathers did not show mean growth nor did shared or no custody fathers relative to full custody fathers. However, there were significant individual differences in growth rates indicated by the variance component ($r_{1i} = 3.48, p < .001$).

For fathering activities, there were significant individual differences in average levels and in growth rates but there were no significant custody contrasts for average mean levels nor for mean growth rate comparisons. No custody fathers were marginally lower on the average in the number of reported father-child activities relative to full custody fathers. There was a marginal decline in activities reported for full custody fathers. For positive involvement, there were significant individual differences in average levels over time with both shared custody and no custody fathers showing evidence of being rated higher in observed positive involvement ($\beta_{00} = .20, p < .01$ and $\beta_{00} = .19, p < .10$, respectively). There was no evidence of mean growth in positive involvement nor significant group contrasts. This meant that fathers differed in their average levels of involvement over time but the levels were relatively stable for individuals.

For father identity, fathers exhibited significant individual differences in levels and growth rates of salience over time. However, there were no mean differences for levels or growth rates. Similarly, growth rates did not differ for father centrality. However, shared custody fathers had higher average levels of centrality relative to the full custody fathers ($\beta_{00} = .20, p < .01$). In summary, although the levels of involvement indicators, particularly the amount of contact, varied as a function of custody, the mean growth rates or change over time for divorced fathers did not differ by custody. Similarly, growth rates for identity measures did not differ. However, for both involvement and identity there were significant individual differences in growth rates.

Father Identity Predicting Father Involvement Over Time

Next, hypothesized predictors of father involvement were entered in theoretical blocks starting with the Time 1 fixed effects predictors in Model 1 (M1). Model 2 (M2) entered the time-varying average level predictors and Model 3 (M3) entered the Time $\times$ predictor interactions or change variable (Δ) effects. Models were also evaluated for improvement in prediction and significant reduction in the chi-square deviance. The unstandardized coefficients and their significance levels are shown in Table 3.

In general, Hypothesis 1 was supported with the exception of observed positive involvement. Controlling for father age, SES, age and sex of the child, as well as the time-varying effect of conflict with the former spouse, identity salience at Time 1 significantly predicted overnights per month ($\beta = 1.14, p < .05$), the number of father-child activities ($\beta = 1.12, p < .05$) and was marginally associated with days per month ($\beta = 1.05, p < .10$). Independently, Time 1 father centrality predicted days per month ($\beta = 2.35, p < .05$), overnights ($\beta = 4.48, p < .05$) and fathering activities ($\beta = 3.19, p < .05$). For fixed effects of the child, sex was not a predictor of involvement indicators. Fathers were observed to be more positive with younger children, or conversely, less positive with older children.

For time-varying effects, the M2 average time-varying predictors showed that father salience predicted the number of overnights per month reported ($\beta = .97, p < .05$) and centrality predicted the number of fathering activities ($\beta = 1.59, p < .05$). For change in identity, both increases in father salience (Δ) and increases in father centrality (Δ) predicted growth in the number of days per month ($\beta = .98$ and 2.37 , respectively, $p < .05$). However, change in identity was not associated with overnights, activities, or positive involvement. Time varying average effects

of conflict were associated with reduced number of days, overnights, and were marginally associated with lower levels of positive involvement.

The final model (M4) examined custody by time varying interactions testing hypothesis 3. There was minor support for the effects of fathering identity being stronger for shared or no custody fathers. For change over time, the effect of increases in father centrality was stronger for shared custody fathers in predicting the number of overnights relative to full custody fathers ($\beta = 4.97, p < .05$). Likewise, increases in father salience predicted positive involvement at a greater rate for shared custody fathers in comparison ($\beta = .40, p < .05$). For positive involvement, the data showed that average levels of father salience were more predictive for full custody fathers relative to shared custody fathers ($\beta = -.83, p < .05$) and no custody fathers ($\beta = -.80, p < .05$), meaning that on the average father salience was more predictive of observed positive behavioral involvement for full custody fathers although they were rated relatively lower on levels of positive involvement as shown in Table 2. Thus full custody fathers may be observed to be less positive, perhaps more harsh, but less so for fathers with high identity salience.

Father Involvement predicting Father Identity Over Time

The next set of analyses addressed Hypothesis 2 and whether father involvement predicted changes in fathering identities. Although there was no mean growth observed of differences by custody, there were individual differences within the sample for changes in identity. Results are shown in Table 4. There was mixed support for Hypothesis 2. Little evidence was found showing that time varying levels of father contact, behaviors, and activities predicted fathering identities over time. However, Time 1 levels of fathering activities predicted salience ($\beta = .01, p < .01$) and centrality ($\beta = .04, p < .001$), and both overnights and positive involvement predicted levels of father centrality over time ($\beta = .01, p < .01$ and $\beta = .08, p < .05$, respectively). Like involvement, sex of the child did not predict father identity; however, fathers of younger children ranked higher in salience over time.

There was some support but minimal that effects of involvement might be stronger for shared or no custody fathers. Change in over nights was more predictive of centrality for no custody fathers relative to full custody fathers ($\beta = .01, p < .01$) and overnights were marginally more predictive for shared custody fathers ($\beta = .01, p < .10$).

Discussion

The symbolic interaction perspective has been widely applied to the question of understanding what influences father involvement. The majority of research has examined nonresidential fathers compared with married fathers, and further, has mainly examined crosssectional samples. The present study examined variance within custody groups of divorced fathers using time-varying analyses. Symbolic interaction posits that identities and meanings are guides for behavior, hypothesizing that fathering identities would predict involvement over time. At the same time, symbolic interaction states that meanings are acquired through social interaction. Thus, dynamic process theories of behavior and identities (cf., Burke, 1991) suggest that behavioral interactions can reinforce or even modify identities. For example, if the behavioral interactions do not support one's identity standards or views of self, particular identities may decrease in importance.

Specifically, the present study asked whether identity predicted involvement over time, whether involvement predicted identity over time, and whether these effects varied as a function of fathers' custody. There was evidence that identities were associated with involvement over time and that initial levels of involvement were associated with levels of fathering identity over time. However, time-varying predictors suggested that identities were

more predictive involvement than *vice versa*. Time 1 father identities, measured as salience and centrality, were important predictors of days per month, overnights per month, and the number of father child activities reported over an 18-month period following divorce. Changes in fathering salience and centrality predicted the number of day visits per month.

The descriptive data indicated that the amount of involvement differed by custody status but there were few differences in the quality of father involvement by custody with the exception of shared custody fathers being rated higher in observed positive involvement. Further, fathers did not differ in the growth rates nor change in involvement or identity according to custody status. So although the amount of contact differed in levels, an advantage of the longitudinal data was the suggestion that these fathers exhibited fewer differences between custody groups and more variance within custody groups over time.

The divorce literature has mainly reported that divorced fathers decrease in their contact over time. The observed means in the present sample did not exhibit significant mean decreases in the amount of contact or observed positive involvement. There was a marginal decline in the number of father-child parenting activities which translated to roughly 1 fewer activity over 2 years for each custody group. This suggested that divorced fathers, on the whole, maintained contact and quality involvement over time; however, there were individual differences.

For child characteristics, although one prior study reported that fathers describe daughters as least troublesome to parent (DeMaris & Greif, 1997), findings in the current study were consistent with studies showing that child gender does not influence involvement as previously thought (Stephens, 1996). Gender did not predictor identity outcomes either. The data did suggest that for younger children, fathers were more positive and had higher identity salience.

For observed positive involvement, full custody fathers were observed to be less positive relative to shared custody fathers. Increases in identity salience for shared custody fathers also predicted positive involvement, potentially accounting for the higher levels of involvement. However, average levels of identity salience, as opposed to increases, were more beneficial for full custody fathers relative to both shared and no custody fathers in predicting levels of positive involvement. So although there was less positivity, for high salient full custody fathers positivity was higher.

The lower levels of positive involvement may also infer relatively greater harshness for full custody fathers. This could be a function of full custody fathers being the primary authoritative or authoritarian disciplinarians. This finding would be consistent with Fox and Bruce's (2001) community sample showing residential fathers to be more harsh and with representative studies showing that stepfathers and nonresidential fathers are exhibit less warmth and use less behavioral control compared to residential fathers (Hofferth et al., 2002).

It was interesting to note that shared custody fathers also obtained higher centrality relative to both full custody and no custody fathers. Prior studies have also found psychological benefits of joint custody (Bauserman, 2002; Madden-Derdich & Leonard, 2000) theoretically positing that shared and full custody fathers may have better adjustment because of increased contact with their children and a sense of control in co-parent interactions. This notion may be supported by the marginal evidence that increases in overnights were associated with higher levels of father centrality for shared custody fathers as well as no custody fathers. That is, as increased overnights occurred there were commensurate changes in centrality.

Practice Implications

The present findings underscore how identity may be a mechanism influencing father-child interactions, activities, and contact. Cognitive behavioral approaches centering on fathering

identities may have the potential to impact changes in involvement following divorce. Yet to date, few studies have directly involved intervention programs to target changes in identity or identity development (Montgomery, Hernandez, & Ferrer Wreder, 2008). From a symbolic interactionist perspective, some cognitive behavioral approaches could be skills based interventions that provide positive reinforcement and feedback for strengthening desired definitions of self may have great potential for translation to interventions for divorced fathers. One example is the Swedish “Marte Meo” video feedback approach for developing better interaction skills and providing positive reinforcement for behavioral skills. Marte Meo means “building on one’s own strengths” (Axberg, Hansson, Broberg, & Wirtberg, 2006). The “possible selves” intervention program provides definitions of desired self and has shown to be effective with at risk adolescents (Oyserman, Terry, & Bybee, 2002).

The present theoretical perspective emphasizes both how behavioral interactions shape meanings and definitions of self, and conversely how identities provide behavioral guidance. Because of their desire to stay involved with their children, effective programs targeting father identities may benefit from father-oriented components increasing men’s awareness of the fathering role and how it impacts child development and fills child-centered needs (Brotherson, Dollahite, & Hawkins, 2005; Parke & Brott, 1999).

Although historically fathers are becoming more involved in their children’s lives, fathers still identify with “breadwinning” (Mauer & Pleck, 2006), and “caregiving” is still primarily defined as *woman’s work*; which means that many fathers need to cognitively redefine tasks that are nontraditional for men as still somehow being masculine (Doucet, 2004). Because men continue to be socialized as helpers to mothers, Parke and Brott (1999) recommend that parenting education should begin early in schools to reduce gender stereotypes. Men need to think of being partners not as helpers to mothers; couples err by neglecting to give parenting the same weight as other domestic chores.

Presently, very few evidence-based programs for divorced fathers exist focusing on putative mechanisms of quality father involvement. Two recent evidence-based programs promoting father involvement focused on the reduction of coparenting conflict with couples. These were the Dads for Life (DFL) program (Braver, Griffin, & Cookston, 2005) focused on shared custody divorced families and the Strengthening Father Involvement (SFI) program (Cowan, Cowan, Pruett, & Pruett, 2007) focused on low income couples. Like the DFL, the SFI has demonstrated reductions in coparenting conflict over time and more recently has shown benefits to children’s problem behaviors (Cowan, Cowan, Pruett, Pruett, & Wong, 2009). In addition to direct work with fathers or couples, approaches involving work with children incorporating father involvement may benefit divorced families. For example, recent work with parent child interaction therapy (PCIT) has shown greater child benefits involving components of father involvement (Bagner & Eyberg, 2003).

Support groups may also be particularly salient for fathers. Parke and Brott (1999) report that men who participate in support groups, can experience a powerful sense of centeredness, arising from a growing sense of affirmed identity within a community. However, men who join support groups tend to stay active only until their particular problems and concerns are ameliorated, and then they tend to move on. The Cowan et al. (2009) study found greater benefit for working with couples than for the intervention component working with father groups only. However, it remains to be seen how fathering groups may benefit divorced fathers of differing custody statuses. The present data suggested that after controlling for time-varying coparenting conflict, fathering identity had an independent effect on time-varying involvement measures. Identity salience was even a main effects buffer for positive involvement for full custody fathers.

Limitations and Future Research

Although the theoretical model was supported, there were several limitations. The measures of father involvement were lacking in specificity regarding the amount of time spent during visits or time duration of activities. Time series and diary approaches providing logs and specificity would provide more reliable estimates (Wical & Doherty, 2005). Further, there was no specificity on the mode of contact in the dependent variables (e.g., telephone, email, face to face). Leite and McKenry (2006) provide a good example on the amount and type of contact for nonresidential fathers. The mode may affect developmental influences, activities, and interactional quality. The measures of involvement did not include financial contributions and important marker of father involvement and fathering roles. Replication of the present models could be better evaluated with more precise measures.

The present study was also regionally bound and temporally bound. A more ecological framework is needed within larger more diverse samples (Coley, 2001). It is also possible that some of the present factors for post-divorce involvement are racially or culturally specific and may be moderated processes of involvement (Hofferth, 2003). For time, the data were limited to 18 months and the use of 3 waves. It is possible that longer time frames may produce amplified or weakened effects. More data waves would provide the ability to examine nonlinear growth as well. Given these limitations, the present study advanced prior studies by incorporating father-reported data and observation of father-child interaction over time. Much of the prior work with identity measures have been crosssectional. Beyond a longitudinal model, a randomized control trial targeting fathering identities would better demonstrate causality.

Another limitation to the present study was the lack of specificity for identity processes. Many of the studies reviewed above delineate how reflected appraisals lead to satisfaction or salience, which are in turn, hypothesized to predict greater commitment and role performance or time in role. In addition, the growing number of identity and father involvement studies has utilized a wide range of identity measures. Longitudinal analyses with competing or standard measures would benefit the field.

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Means and Standard Deviations, and Significant Cross-sectional Contrasts for Father Involvement and Identity Measures

Table 1

	(1) Full Custody Residential <i>M (SD)</i>	(2) Shared Custody <i>M (SD)</i>	(3) No Custody Nonresidential <i>M (SD)</i>	<i>F</i>	Contrasts
<u>Days Per Month</u>					
Time 1	25.71 (6.72)	15.39 (6.60)	11.91 (7.39)	49.13***	1 > 2 > 3
Time 2	24.67 (9.61)	16.91 (7.37)	9.89 (6.32)	39.14***	1 > 2 > 3
Time 3	22.47 (10.85)	17.05 (7.03)	10.00 (7.85)	24.89***	1 > 2 > 3
<u>Overnights Per Month</u>					
Time 1	25.50 (7.19)	12.41 (6.31)	6.91 (6.04)	104.66***	1 > 2 > 3
Time 2	25.13 (9.10)	13.27 (6.75)	6.37 (6.31)	66.13***	1 > 2 > 3
Time 3	22.87 (10.64)	13.62 (7.20)	5.77 (6.14)	46.65***	1 > 2 > 3
<u>Father-Child Activities</u>					
Time 1	18.13 (2.63)	18.04 (2.98)	16.96 (4.65)	2.35 [†]	2 > 3
Time 2	17.26 (3.14)	17.69 (3.30)	16.18 (5.74)	2.39 [†]	2 > 3
Time 3	16.81 (4.76)	17.73 (2.87)	16.16 (5.55)	2.59 [†]	2 > 3
<u>Observed Positive Involvement</u>					
Time 1	6.12 (.59)	6.36 (.54)	6.36 (.55)	2.62 [†]	2 > 1
Time 2	5.97 (.67)	6.26 (.61)	6.30 (.51)	2.54 [†]	2 > 1
Time 3	6.15 (.45)	6.25 (.64)	6.10 (.73)	.56	
<u>Father Salience</u>					
Time 1	4.37 (.65)	4.33 (.64)	4.18 (.79)	1.29	
Time 2	4.34 (.61)	4.36 (.62)	4.07 (.81)	3.50*	2 > 3
Time 3	4.35 (.71)	4.28 (.72)	4.22 (.75)	0.25	
<u>Father Centrality</u>					
Time 1	3.72 (.38)	3.89 (.34)	3.68 (.39)	8.22***	2 > 1, 3
Time 2	3.63 (.44)	3.86 (.35)	3.63 (.43)	8.32***	2 > 1, 3
Time 3	3.57 (.52)	3.90 (.35)	3.62 (.49)	11.26***	2 > 1, 3

p < .001;

 $p < .001$;
*
 $p < .05$;
†
 $p < .10$

Table 2

Average Level Intercepts and Growth Rate Contrasts by Custody Status with Full Custody Fathers as the Comparison Group

	Average Level Intercept		Growth Rate	
	(β_{00})	(r_{0i})	(β_{01})	(r_{1i})
	<u>Mean</u>	<u>Variance</u>	<u>Mean</u>	<u>Variance</u>
Days per Month	24.85***	30.70***	-1.21	6.73***
Shared Custody	-8.44***		2.12 [†]	
No Custody	-13.91***		0.48	
Overnights per Month	24.91***	35.11***	-0.84	3.48***
Shared Custody	-11.92***		1.25	
No Custody	-18.25***		0.54	
Fathering Activities	17.62*	11.96***	-0.72 [†]	3.27***
Shared Custody	0.17		0.49	
No Custody	-1.34 [†]		0.10	
Positive Involvement	6.08***	0.08***	-0.02	0.003
Shared Custody	0.20**		-0.05	
No Custody	0.19 [†]		-0.12	
Father Salience	4.32***	0.29***	-0.06	0.05**
Shared Custody	0.01		0.02	
No Custody	-0.17		0.04	
Father Centrality	3.68*	0.12***	-0.05	0.02***
Shared Custody	0.20**		0.04	
No Custody	-0.04		-0.02	

 $p < .001$;

**
 $p < .001$;

*
 $p < .05$;

[†]
 $p < .10$

Table 3

Unstandardized Estimands for predictors of Father Identity over 18 months

	Days Per Month	Overnights Per Month	Fathering Activities	Positive Involvement
18 Month Intercept (Average levels)	17.46 ^{**}	14.15 [*]	1.16	6.26 ^{***}
<u>M1 Time 1 Predictors</u>				
Shared Custody	-9.26 ^{***}	-13.02 ^{***}	-0.78	0.14 [†]
No Custody/Nonresidential	-13.28 ^{***}	-18.14 ^{***}	-1.09 [†]	0.19 [†]
Age of Father	-0.12 [*]	-0.11	0.01	0.01 [*]
Age of Child	0.03	0.00	-0.13	-0.05 ^{**}
Sex of Child (boy)	-0.61	-0.59	0.25	0.03
Socioeconomic Status	-0.09	-0.11	0.77 [*]	0.07 [†]
Father Salience T1	1.05 [†]	1.14 [*]	1.12 ^{**}	0.09
Father Centrality T1	2.35 [*]	4.48 [*]	3.19 ^{***}	0.18
Former Spouse Conflict T1	-4.75	-1.64	-0.03	-0.36 [†]
<u>M2 Time-Varying Predictors</u>				
Time (growth rate)	-13.78 ^{**}	-0.19	-0.45 [*]	-0.09 [*]
Father Salience	-0.27	0.97 [*]	-0.16	-0.01
Father Centrality	-0.99	-0.22	1.59 [*]	-0.05
Ex-Conflict	-9.62 [*]	-8.82 ^{**}	-0.08	-0.62 [†]
<u>M3 Time × Time-Varying Predictors (Δ)</u>				
Δ Father Salience	0.98 [*]	—	—	—
Δ Father Centrality	2.37 [*]	—	—	—
Δ Ex-Conflict	2.92	—	—	—
χ^2 Deviance reduction	10.10 [*]	287.27 [*]	322.19 ^{***}	56.84 ^{***}
Δ df from Previous Model	3.00	6.00	6.00	6.00
<u>M4 Custody × Time-Varying Interactions</u>				
Father Salience × Shared Custody	—	—	—	-0.83 [*]
Father Salience × No Custody	—	—	—	-0.80 [*]
Δ Father Salience × Shared Custody	—	—	—	0.40 [*]
Δ Father Centrality × Shared Custody	—	4.97 [*]	—	—

M = Model; Δ = Change;

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

Table 4

Unstandardized Estimands for predictors of Father Identity over 18 months

	Father Salience	Father Centrality
18 Month Intercept (Average levels)	0.60**	2.42***
<u>M1 Time 1 Predictors</u>		
Shared Custody	0.01	0.26**
No Custody/Nonresidential	0.02	0.19 [†]
Age of Father	0.004**	−0.00
Age of Child	−0.02***	−0.02
Sex of Child (boy)	0.03	0.03
Socioeconomic Status	−0.04**	0.04
Days per Month T1	0.00	−0.00
Overnights per Month T1	0.00	0.01**
Fathering Activities T1	0.01**	0.04***
Positive Involvement T1	−0.00	0.08*
<u>M2 Time-Varying Predictors</u>		
Time (growth rate)	—	—
Days per Month	—	—
Overnights per Month	—	—
Fathering Activities	—	—
Positive Involvement	—	—
<u>M3 Time × Time-Varying (Change effects)</u>		
Δ Days per Month	—	—
Δ Overnights per Month	—	—
Δ Fathering Activities	—	—
Δ Positive Involvement	—	—
χ^2 Deviance reduction	37.01**	249.90***
Δ df from Previous Model	16.00	16.00
<u>M4 Custody × Time-Varying Interactions</u>		
Δ Overnights × Shared Custody	—	0.01 [†]
Δ Overnights × No Custody	—	0.01**

M = Model; Δ = Change;

 $p < .001$;**
 $p < .01$;*
 $p < .05$;[†]
 $p < .10$