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Contributions of Parent–Adolescent Negative Emotionality, Adolescent Conflict, and Adoption Status to Adolescent Externalizing Behaviors

Bibiana D. Koh and Martha A. Rueter
Department of Family Social Science, University of Minnesota

Although most adopted children are well adjusted, research has consistently found that adopted adolescents are at an increased risk for externalizing behaviors. The present investigation tested a model whereby parent–adolescent negative emotionality traits, adolescent conflict, and adoption status contribute to adolescent externalizing behaviors. The study included 616 families with at least one parent and two adolescent siblings with a maximum 5-year age difference. The analyses used data from the mothers (M age = 45.56, SD = 4.23), fathers (M age = 48.23, SD = 4.42), and the elder sibling (M age = 16.14, SD = 1.5). Findings support two conflict-mediated family processes that contributed to externalizing behaviors: one initiated by parent–adolescent traits and one by adoption status. Findings also underscore the salience of conflict in families and the significance of aggressive traits and negative emotionality. Contrary to previous research, we found that adoption status did not directly add to our explanation of adolescent externalizing behaviors beyond our proposed process. Instead, adoption status was indirectly associated with externalizing problems through a conflict-mediated relationship.

Given that 1.5 million (approximately 2%) U.S. children are adopted (Nickman et al., 2005) and empirical evidence suggesting that adopted adolescents may be at increased risk for externalizing behaviors (Keyes, Sharma, Elkins, Iacono, & McGue, 2008), there is a critical need to understand specific factors that contribute to this risk. Meta-analyses examining decades of descriptive research have confirmed this increased risk, although note that most adopted adolescents are well adjusted (Juffer & van IJzendoorn, 2005; Wierzbicki, 1993). Recently, researchers have suggested moving beyond describing this risk to focusing on explaining processes that contribute to it (Palacios, 2009). In response, we tested a theoretical model that seeks to explain how adoption status contributes to adolescent externalizing behaviors. Attention is paid to linking constructs with firmly established associations with externalizing behaviors to help explain this increased risk. Two such constructs are temperament and conflict.

One well-established construct associated with externalizing behaviors is temperament (Rothbart & Bates, 1998). The temperamental characteristic of negative emotionality has been associated with externalizing behaviors (Eisenberg et al., 2000; Eisenberg et al., 2009; Rhee et al., 2007). For example, a study by Eisenberg et al. (2000) found that children high in negative emotionality exhibited more problem behaviors. Yet this research is limited because it primarily examines child main effects. Person–environment transactional theory suggests that children develop within the context of parent–child interactions (Casi, Elder, & Bem, 1987, 1988). Therefore, parent–child negative emotionality traits may be more salient than child traits alone when
considering the association between negative emotionality and externalizing behaviors. Because research classifies temperament as part of the broader concept of personality and focuses on specific dispositional traits (Eisenberg et al., 2008), we refer to specific traits (e.g., aggression) or use the term temperament hereafter. Higher and lower order personality traits (lower order traits are indicators of a higher order factor) are also referenced based on factor analytically derived personality structures.

Similarities and differences in parent and child traits figure into the association between temperament and externalizing behaviors. Dyadic similarity is defined as parent–child trait levels that are the same (e.g., both have high aggression), whereas dyadic dissimilarity is defined as different combined trait levels (e.g., one has high aggression, the other has low). The latter may be particularly salient for adoptive families because behavior genetics research shows that temperament is at least partially heritable (Izen, Baker, Raine, & Bezdjian, 2009). Thus, adoptive parents and children are more likely to have dissimilar temperaments because they do not share genetic relations. Inconclusive findings on dyadic similarity/dissimilarity (e.g., both have been associated with higher levels of conflict) support our contention that dyadic combinations may be salient (Lemery & Goldsmith, 2001; Munn & Dunn, 1989).

However, research has not examined the effects of parent–adolescent dyadic trait combinations and adoption status on adolescent externalizing behaviors.

Conflict is a second construct associated with externalizing behaviors. Parent–child conflict is associated with child adjustment (Eisenberg et al., 2008), and behavior genetics research has established a genetic component to the association between parent–child conflict and externalizing outcomes (Burt, Krueger, McGue, & Iacono, 2003; Burt, McGue, Krueger, & Iacono, 2005). Yet this research focuses on explaining variance attributed to individual effects rather than examining adolescent externalizing behaviors within a family context.

Empirical research also shows an association between temperament and conflict (Eisenberg et al., 2008). For example, Barber (1994) found that adolescents with “difficult” temperaments (vs. “easier”) were more likely to engage in conflictual parent–child interactions. Adolescent temperamental characteristics (e.g., control) also contribute to varying levels of conflict (Dekovic, 1999). Indeed, control or disinhibition traits may be linked to conflict avoidance behaviors, reducing conflict. Conversely, one could hypothesize that children with negative emotionality traits (e.g., aggressive tendencies) may be more likely to initiate conflict.

A handful of studies have examined parent–child conflict in adoptive families (Lansford, Ceballo, Abbey, & Stewart, 2001; Rosnati & Marta, 1997; Rueter, Keyes, Iacono, & McGue, 2009). For example, Lansford et al. (2001), found that adoptive mothers reported more parent–child disagreements than nonadoptive mothers. Rueter et al. (2009) found higher parent–adolescent conflict levels in adoptive families than in nonadoptive ones. Statistically significant differences in these family types were limited to observed adolescent behavior directed toward each parent (and not vice versa). Both studies were descriptive and did not test processes that may help explain these differences and clarify the role of adoption status.

Taken together, it is reasonable to suggest that parent–adolescent negative emotionality traits, adolescent conflict, adoption status, and externalizing behaviors are associated. Yet the complex relationships among these variables have not been tested. The present study applied goodness of fit and person–environment transactional theoretical frameworks to provide a context in which to understand our proposed associations.

**THEORETICAL FRAMEWORKS**

Goodness of fit (Lerner, 1993; Thomas & Chess, 1977) and person–environment transactional (Caspi et al., 1987, 1988; Scarr & McCartney, 1983) theories may help explain the relationships among our proposed constructs in Figure 1. First, goodness of fit theory may explain how various parent–adolescent trait combinations are associated with adolescent behavioral outcomes. Traditional goodness of fit theory posits that a good “fit” between child characteristics and parental demands contributes to optimal child functioning. Yet child characteristics alone fail to explain this fit. Instead, we suggest that both parent and child characteristics (specifically, temperamental traits) contribute to environmental adaptation and optimal child outcomes—the extent of which is defined by the dyadic trait fit. For example, a child with high aggression is likely to need a parent with low aggression for optimal agreement.

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**FIGURE 1** Proposed conceptual process model. *Note:* Path conceptualized but not pictured: adoption status to adolescent externalizing behaviors; $a =$ paths entered at Step 2; $b =$ paths entered at Step 3.
development, because different temperamental traits have different developmental needs (Rutter, 1989). This dyadic combination is likely to be a good, adaptive fit and contribute to more positive outcomes.

Second, person–environment transactional theory may explain how conflictual interactions (specifically, observed adolescent to parent conflict) contribute to the process of children shaping their own developmental outcomes (Bell, 1968; Lewis, 1981). For example, combined low levels of parent–adolescent negative emotionality traits may interact such that the dyadic traits are adaptive and fit well—leading to lower conflict and externalizing levels. Yet if both have high levels, they are more likely to reinforce each other’s negative behaviors vis-à-vis reactive or evocative transactions in a “downward spiral” (Burt et al., 2005). This maladaptive dyadic fit is likely to contribute to problematic behaviors.

Empirical support from family transactional (Patterson, 1982) and parent–child reciprocal effects research (Rueter & Conger, 1998) lend support for a person–environment transactional framework. Mounting evidence suggests that reciprocal parent–child interactions influence behavior over time (Conger & Ge, 1999; Kim, Conger, Lorenz, & Elder, 2001; Larsson, Viding, Rijsvijk, & Plomin, 2008; Rueter & Conger, 1998). For example, Kim et al. (2001) found evidence of a maladaptive negative emotion reciprocal influence in parent–adolescent interactions. Similarly, Rueter and Conger (1998) found maladaptive reciprocal effects whereby negative, inconsistent parenting led to a decrease in positive adolescent behavior, and positive, nurturant parenting led to an increase in negative adolescent behavior.

We suggest a process whereby certain combinations of parent–adolescent negative emotionality traits (e.g., combinations reflecting low levels) are more likely to be adaptive and be associated with positive outcomes. Conversely, certain parent–adolescent negative emotionality trait combinations (e.g., combinations reflecting high levels) are more likely to be maladaptive and be associated with externalizing behaviors. We apply goodness of fit and person–environment transactional theories to consider the trait fit between both parent and child characteristics within the context of an adaptive transactional family environment.

METHODOLOGICAL ISSUES

The present study addresses two important methodological issues relevant to our hypothesized associations. First, challenges in identifying negative emotionality’s structure (e.g., a global, higher order construct or one with discrete lower order parts) are intertwined with its inconsistent structural classification and measurement (Frick, 2004). Although we know traits exist, we do not know which ones are salient in family processes. Therefore, we tested our hypothesized process using both higher (negative emotionality) and lower order (aggression, alienation, and stress reactivity) constructs.

Second, with the exception of a handful of studies (Galambos & Turner, 1999; Rettew, Stanger, McKee, Doyle, & Hudziak, 2006; van Tuijl, Branje, Dubas, Vermulst, & Van Aken, 2005), research examining the association between temperament and externalizing behaviors primarily employs an individual unit of measurement. This approach fails to account for parent–child transactions that may contribute to adolescent externalizing behaviors. Research suggests that, along with child traits, parent traits may explain externalizing behaviors (Eisenberg et al., 1999). Therefore, we argue that both parent and adolescent traits must be considered.

This dyadic measurement approach is consistent with both our theoretical frameworks and reciprocal effects research. It also underscores the theoretical importance of a transactional environment. In lieu of using longitudinal data to demonstrate reciprocal effects, it makes good logical sense to measure dyadic traits at a given point in time because parent and child behaviors are closely related and influence each other. Rather than a dyadic trait variable that combines parent-only and adolescent-only levels of traits in exhaustive combinations, each dyadic trait level should reflect findings from reciprocal effects research.

CURRENT STUDY

Figure 1 depicts the study hypotheses. Empirical descriptive research has established a direct effect of adoption status on (a) externalizing behaviors (Juffer & van Ijzendoorn, 2005; Keyes, Sharma, Elkins, Iacono, & McGue, 2008; Rueter & Koerner, 2008), and (b) conflict (Lansford et al., 2001; Rueter et al., 2009). Building on this, we proposed an explanatory family process whereby parent–adolescent traits, adolescent conflict, adoption status, and adolescent externalizing were predicted to be associated in complex patterns. We also tested a direct effect of adoption status on parent–adolescent traits. Because previous research has identified age (McGue, Elkins, Walden, & Iacono, 2005) and gender differences (Conger & Ge, 1999; Rothbart & Bates, 1998) with respect to variance in the latent constructs, age and gender were controlled in each trait model.

METHOD

Participants

Data for this study were from the Sibling Interaction and Behavior Study (McGue et al., 2007), a longitudinal
study examining sibling and family influences on adolescent behavior. Participating families \((N = 617)\) had at least one parent and two adolescent siblings with a maximum 5-year age difference. The present study used data from the mothers \((M \text{ age } = 45.56, \ SD = 4.23)\), fathers \((M \text{ age } = 48.23, \ SD = 4.42)\), and the elder sibling \((M \text{ age } = 16.14, \ SD = 1.5)\). In 384 families, the elder sibling was adopted (international adoptions: \(n = 252, 66\% \text{ Asian})\). In 232 families, the elder sibling was the biological offspring of the parents. All parents were predominantly middle class and Caucasian. One elder adoptee was removed from the sample due to a biological relation to the sibling, resulting in a final sample of 616 families.

Eligible families were required to have participating adopted children placed before 2 years of age \((M = 4.7 \text{ months, } SD = 3.4 \text{ months})\), have no special needs children, and live within driving distance of the university. Families with adopted children were recruited from three adoption agencies. Families with biological children were recruited through state birth certificates. The study sample is generally representative of two-parent families with two or more children in the university’s metropolitan region (McGue et al., 2007).

**Procedures**

Using procedures approved by the university Institutional Review Board, all participating families completed informed consent, a battery of assessments, and two 5-min videotaped family interaction tasks during a half-day visit to the Minnesota Center for Twin and Family Research (MCTFR). Family members also completed mailed, previsit personality questionnaires prior to the in-person interview. Each family member separately completed self-report questionnaires in MCTFR interview offices after the recorded family interactions. For the videotaped family interactions, all family members were seated around a table in a room decorated to look like a living/dining room. Discussions were recorded by an inconspicuously placed video camera. Tasks were explained to the family by a trained interviewer, who left the room during videotaping. The first task consisted of a family attempt to reach consensus about a Rorschach inkblot. For the second task, the family attempted to resolve a moral dilemma.

**Measures**

**Parent and adolescent traits.** Parent–adolescent dyadic trait fit was defined as parent–adolescent traits hypothesized to be adaptive and beneficial to adolescent functioning. Traits assessed included negative emotionality (a higher order scale) and its three lower order dimensions (aggression, alienation, and stress reactivity). Mothers, fathers, and adolescents each separately completed a premailed Multidimensional Personality Questionnaire (MPQ; Tellegen & Waller, 2008) or a Personality Booklet–Youth Abbreviated (PBYA; Tellegen & Waller, 2008) questionnaire prior to their MCTFR visit. The MPQ is a factor analytically developed measure of higher and lower order personality traits. The PBYA is a shortened version of the MPQ designed for adolescents younger than 16 years of age. All questionnaire items used a 4-point scale, ranging from 1 (definitely false) to 4 (definitely true) and were reverse coded as necessary so that high scores reflected high trait levels.

The higher order scale, Negative Emotionality, was created by summing three 18-item lower order MPQ or PBYA scales (Tellegen & Waller, 2008). The Aggression scale measures proclivities toward physical/cognitive aggression and includes items such as, “When someone hurts me, I try to retaliate (get even)” and “When I get angry, I am often ready to hit someone.” Alienation measures feelings of estrangement/victimization and includes items like, “People often try to take advantage of me” and “Some people oppose me for no good reason.” Stress Reactivity measures mood regulation/lability and includes items like, “I often find myself worrying about something” and “When I want to, I can usually put fears and worries out of my mind.” Internal consistency of the Aggression (\(\alpha = .77–.88\)), Alienation (\(\alpha = .81–.87\)), and Stress Reactivity (\(\alpha = .87–.90\)) scales has been tested across four college and community samples (Tellegen & Waller, 2008). Internal consistency was also examined using the study sample: Aggression (mothers, \(\alpha = .56\); fathers, \(\alpha = .76\), adolescents, \(\alpha = .80\)), Alienation (mothers, \(\alpha = .80\); fathers, \(\alpha = .88\), adolescents, \(\alpha = .80\)), Stress Reactivity (mothers, \(\alpha = .78\); fathers, \(\alpha = .84\), adolescents, \(\alpha = .77\)), and Negative Emotionality (mothers, \(\alpha = .86\); fathers, \(\alpha = .92\), adolescents, \(\alpha = .88\)).

Using parent and elder sibling reports of Negative Emotionality, Aggression, Alienation, and Stress Reactivity, dyadic Mother–Adolescent and Father–Adolescent Trait variables were created in three steps. In this process, the unit of measurement changed from individual to dyadic. First, for each scale, we identified individuals with low, medium, and high traits. Because MPQ and PBYA scales do not have standardized cutoffs for low or high scores, we used standard deviations to demarcate individual-level (parent-only and adolescent-only) low, medium, and high traits. Individuals whose trait score was more than 1 standard deviation below the scale’s mean were assigned a low trait level. Those with a trait score within 1 standard deviation of the scale’s mean were assigned a medium level. Individuals with trait scores 1 standard deviation above the scale’s mean were assigned a high level.
TABLE 1
Empirically Supported Combined Levels of Parent–Adolescent Dyadic Traits

<table>
<thead>
<tr>
<th>Individual Trait Ratings</th>
<th>Dyadic Trait Variable</th>
</tr>
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<tbody>
<tr>
<td>Parent</td>
<td>Adolescent</td>
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<tr>
<td>High</td>
<td>High</td>
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<tr>
<td>High</td>
<td>Medium</td>
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<td>Medium</td>
<td>High</td>
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<td>High</td>
<td>Low</td>
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<td>Low</td>
<td>Medium</td>
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<td>Low</td>
<td>Low</td>
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</tbody>
</table>

Second, individual-level traits coded as low, medium, and high were combined in all possible combinations (e.g., parent high-adolescent high, parent medium-adolescent high, etc.; see Table 1). This resulted in dyadic-level Negative Emotionality, Aggression, Alienation, and Stress Reactivity trait variables for each mother–adolescent and father–adolescent pair.

Finally, we coded the dyadic combinations shown in Table 1 to ensure that the final dyadic trait variable was consistent with empirical findings on the effects of reciprocal parent–adolescent interactions previously discussed in the introduction. Reciprocal research has shown that higher levels of a negative trait may reinforce another family member’s negative behavior (e.g., Rueter & Conger, 1998). Therefore, the combined dyadic trait levels were coded from 1 (least adaptive dyadic fit) to 5 (most adaptive dyadic fit) such that dyads that included two “high” ratings or one high and one medium rating received a “one.” Dyads received a “two” if they included a high rating and a low rating. Dyads with two medium ratings were coded “three.” Those with one medium and one low rating were coded “four,” and dyads received a code of “five” if they included two low ratings. The resulting mother–adolescent and father–adolescent trait variables were used as indicators of the parent–adolescent dyadic trait fit latent factor for each trait model. All recoded distributions produced skew and kurtosis statistics ≤1, indicating normality (Kline, 2005; Aggression: skew, −.42 to −.52, kurtosis, −.60 to −.87; Alienation: skew, −.40 to −.43, kurtosis, −.65 to −.85; Stress Reactivity: skew, −.32, kurtosis, −.85 to −.88; Negative Emotionality: skew, −.31 to −.38, kurtosis, −.87 to −.90).

Adolescent conflict. Adolescent conflict was defined as hostile, angry, and coercive adolescent behavior directed toward each parent. It was assessed as a latent construct using observer ratings from the Sibling Interaction and Behavior Rating Scales, adapted from the Iowa Family Interaction Rating Scales (Melby & Conger, 2001). In addition to 100 hr of training, observers were required to pass observation and written examinations before independently coding and attending biweekly coder meetings to prevent “rater drift.” To assess interrater reliability, random secondary observers rated 25% of all interactions and secondary ratings were compared to the primary ratings using interclass correlations (ICCs; Shrout & Fleiss, 1979).

Observers globally rated (1 = not at all characteristic to 9 = mainly characteristic) adolescent hostility (hostile, angry, and critical behavior) toward the mother (ICC = .73) and father (ICC = .71) and adolescent angry coercion (attempts to control and/or change behavior or opinions marked by anger and contempt) toward the mother (ICC = .65) and the father (ICC = .67). These variables served as indicators of the adolescent conflict latent construct for each trait model (aggression: hostility: to mother, λ = .83, to father, λ = .77; angry coercion: to mother, λ = .73, to father, λ = .74; alienation: hostility: λ = .81; angry coercion: λ = .71; hostility: λ = .78; angry coercion: λ = .76; stress reactivity: hostility: λ = .82; angry coercion: λ = .72; hostility: λ = .82; angry coercion: λ = .75; negative emotionality: hostility: λ = .81; angry coercion: λ = .71; hostility: λ = .79; angry coercion: λ = .76).

Adolescent externalizing behavior. Adolescent externalizing behavior was defined as antisocial, aggressive, or delinquent behavior in multiple contexts including home, school, and community and assessed as a latent construct with three indicators. Adolescents used the Delinquent Behavior Inventory (Gibson, 1967), to report how often they engaged in 36 behaviors, including “using any kind of weapon in a fight,” “smashing, slashing, or damaging things,” “cutting classes at school,” “stealing things,” ranging 1 (never), 2 (once), and 3 (more than once). Responses were summed to create the first adolescent externalizing indicator (α = .84; aggression: λ = .68; alienation: λ = .64; stress reactivity: λ = .64; negative emotionality: λ = .65).

Symptom counts from the Diagnostic Interview for Children and Adolescents–Revised (Weinre, Reich, Herjanic, Jung, & Amado, 1987) formed the second adolescent externalizing indicator (aggression: λ = .67; alienation: λ = .70; stress reactivity: λ = .71; negative emotionality: λ = .69). Trained interviewers separately administered the Diagnostic Interview for Children and Adolescents–Revised to both adolescents and mothers. Using a “best estimate” method, a symptom was considered present if one or the other reported it; if both reported it, the symptom was only counted once. All adolescent or mother-reported (attention deficit
hyperactivity disorder [ADHD], conduct disorder [CD], and oppositional defiant disorder [ODD]) symptoms were summed. As per Iacono, Carlson, Taylor, Elkins, and McGue (1999), this method yielded acceptable kappa reliabilities: ADHD (.77), ODD (.71), and CD (.81).

The third indicator of adolescent externalizing consisted of a 47-item adolescent externalizing in-class behavior checklist adapted from Conners’ Teacher Rating Scale (Conners, 1969) and the Rutter Child Scale B (Rutter, 1967). Three teachers were nominated by each adolescent, contacted, and asked to complete the survey. The teacher response rate of 78% was not correlated with adolescent gender or adoption status. Items were rated on a 4-point scale, from 1 (not at all characteristic) to 4 (very much characteristic) and included “is defiant,” “has difficulty concentrating on schoolwork,” “is often truant,” “initiates physical fights,” and “obeys the rules” (reverse coded). Each teacher’s responses were summed (range = 49–158.7, x = .97, Spearman–Brown interteacher reliability = .82). The mean of each adolescent’s teacher reports was used as the third indicator of the latent factor (aggression: λ = .65; alienation: λ = .67; stress reactivity: λ = .67; negative emotionality: λ = .67).

Data Analyses

Analytic plan. We proposed that parent–adolescent dyadic trait fit contributed to adolescent conflict and adolescent externalizing behavior beyond variance due to age and gender. We also proposed that this hypothesized process holds even after controlling for adoption status. Due to the complex associations proposed among multiple dependent variables and latent concepts, we used structural equation modeling to test study hypotheses (see Figure 1). Data were screened for normality, outliers, and multicollinearity prior to conducting analyses (Kline, 2005).

Testing our hypotheses consisted of three steps for each trait model (aggression, alienation, and stress reactivity, negative emotionality). In Step 1 (not depicted in Figure 1), we tested a base model in which parent–adolescent dyadic trait fit, adolescent conflict, and adolescent externalizing were each regressed on our control variables, age and gender. This allowed us to determine the amount of variance in each latent construct due to age and gender. In Step 2, we tested the “a” paths (depicted in Figure 1) to determine the amount of variance explained by each construct beyond that explained by age and gender. In Step 3, we added adoption status (adopted = 1, nonadopted = 2) and tested the “b” paths depicted in Figure 1 to determine (a) the amount of variance explained by adoption status over previously added variables, and (b) if our hypothesized process held after accounting for adoption status. In all three steps, residuals for the adolescent conflict latent variable indicators were correlated.

Models with a good fit included a statistically significant chi-square (Bollen, 1989), comparative fit index (CFI) and Tucker–Lewis index (TLI) above .90, standardized root mean square residual (SRMR) less than .08, and root mean square error of approximation (RMSEA) less than .06 (Hu & Bentler, 1999). Analyses were conducted using Mplus 5.2 (Muthén & Muthén, 1998–2009).

Missing value analysis. Sixty percent of the 616 study families had complete data on all study variables. Missing data were due to (a) missing teacher reports of externalizing behavior (31%) and (b) fathers who either did not complete the MPQ (Tellegen & Waller, 2008: 12%) or did not participate in the observation tasks (23%). All other study variables had no more than 3% missing data. Mplus estimates missing data by adjusting model parameter estimates using full-information maximum-likelihood estimation (Muthén & Shedden, 1999; Schafer & Graham, 2002). Reliable estimation requires that the proportion of available data for each study variable and between each pair of variables be at least .10. These proportions ranged from .53 to 1.00, with the vast majority above .85. Therefore, we used full-information maximum-likelihood estimation to estimate missing data.

RESULTS

Preliminary Analyses

Table 2 presents descriptive statistics for all study variables. We also tested for possible differences in the proportion of adoptive and nonadoptive families at each dyadic trait level for each mother–adolescent and father–adolescent dyad across all trait models using Fisher’s exact tests. No statistically significant differences were found. In agreement with earlier descriptive research (Juffer & van IJzendoorn, 2005; Wierzbicki, 1993), regressing adolescent externalizing on adoption status revealed a statistically significant association (β = −.19, t = −4.31, p < .01).

Hypothesis Testing

All hypothesized associations depicted in Figure 1 were tested for each lower and higher order trait model in three steps and are presented accordingly. Overall, the patterns of model fit statistics, explained variance, and statistically significant associations supported our general hypothesis that parent–adolescent dyadic trait
fit contributes to adolescent conflict and explains more variance in adolescent externalizing behavior than adoption status alone. As shown in Table 3, all trait models had good model fit. For example, although the (Step 2) aggression model produced a statistically significant chi-square value, $\chi^2(54.49) = 32, p < .01$, all other fit measures suggest an excellent fit (CFI = .99, TLI = .98, RMSEA = .03, SRMR = .03).

**Step 1 findings.** At Step 1, we tested age and gender contributions to the $R^2$ for each latent construct for all trait models. Age produced similar associations with adolescent externalizing across all models. Gender’s association with adolescent externalizing was also similar across all models. For example, in the aggression model, age ($\beta = .25, t = 5.48, p < .01$) and gender ($\beta = -.43, t = -10.27, p < .01$) explained nearly one quarter of the variance in adolescent externalizing ($R^2 = .22, t = 5.72, p < .01$). In all models, age and gender were unrelated to adolescent conflict, and in all but one model they were unrelated to parent–adolescent dyadic trait fit. The exception was the aggression model. In this model gender (but not age) was associated with parent–adolescent dyadic trait fit (gender: $\beta = .29, t = 6.29, p < .01; R^2 = .08, t = 3.15, p < .01$). Because Step 1 analyses across all models produced results similar to those reported here, Step 1 findings are not reported in Table 3.

**Step 2 findings.** Step 2 findings are presented in Table 3. At this step, we tested all “a” paths depicted in Figure 1. As reported in Table 3, all trait models showed statistically significant increases in $R^2$ for adolescent externalizing. For example, Table 3 reports an explained variance of $R^2 = .50, t = 9.79, p < .01$, for adolescent externalizing in the Step 2 aggression model. Compared to the explained variance produced by the Step 1 aggression model ($R^2 = .22, t = 5.72, p < .01$), this is an increase in explained variance of $28\% (\Delta R^2 = .28)$. This increase in explained variance was due to strong associations between adolescent externalizing and parent–adolescent dyadic trait fit ($\beta = -.45, t = -8.68, p < .01$) and adolescent conflict ($\beta = .24, t = 4.75, p < .01$). Table 3 also shows that only the Step 2 aggression model produced a statistically significant increase in explained variance for adolescent conflict ($\beta = -.23, t = -4.18, p < .01; \Delta R^2 = .05$). Not reported in Table 3 is the indirect effect of parent–adolescent

### Table 2

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**Note:** Inter correlations for nonadopted adolescent participants ($n = 232$) are presented above the diagonal, and inter correlations for adopted adolescent participants ($n = 384$) are presented below the diagonal. Means and standard deviations for nonadopted adolescents are presented in the vertical columns, and means and standard deviations for the adopted adolescents are presented in the horizontal rows.

### Table 3

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**Note:** Inter correlations for nonadopted adolescent participants ($n = 232$) are presented above the diagonal, and inter correlations for adopted adolescent participants ($n = 384$) are presented below the diagonal. Means and standard deviations for nonadopted adolescents are presented in the vertical columns, and means and standard deviations for the adopted adolescents are presented in the horizontal rows.
dyadic trait fit on adolescent externalizing. This effect was only statistically significant in the aggression model ($\beta = -.06$, $t = -3.37$, $p < .01$).

**Step 3 findings.** To examine the possibility that adoption status continues to explain variance in adolescent externalizing behavior beyond our proposed process, we added all “b” paths depicted in Figure 1. As shown in Table 3, the addition of adoption status did not increase the explained variance for adolescent externalizing or parent–adolescent dyadic trait fit in any model, but we did find that the regression of adolescent conflict on adoption status produced a 2% increase in $R^2$ for adolescent conflict in all trait models. Not reported in Table 3 is the indirect effect of adoption status on adolescent externalizing, which was statistically significant in all trait models (aggression: $\beta = -.03$, $t = -2.38$, $p < .05$; alienation: $\beta = -.04$, $t = -2.75$, $p < .01$; stress reactivity: $\beta = -.04$, $t = -2.71$, $p < .01$; negative emotionality: $\beta = -.04$, $t = -2.65$, $p < .01$). Step 3 results for the aggression model are presented in Figure 2.

### Table 3

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*Note: N = 616. All Step 2 (df = 32) and 3 (df = 32) models had same dfs per step. Standardized coefficients for direct (not indirect) relationships only are reported. CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual. 

$p < .05$. **$p < .01$. 

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DISCUSSION

Researchers have documented the need to move beyond describing the risk of externalizing behaviors for adopted adolescents to focusing on explaining processes that contribute to it (Palacios, 2009). This study took the next, necessary step to advance research in this field by testing an explanatory process whereby parent–adolescent traits, adolescent conflict, and adoption status contribute to adolescent externalizing behavior. Our findings support parent–adolescent traits and adoption status initiated family processes that are mediated by conflict and contribute to externalizing problems. It is important to note that adoption status did not significantly explain variance in adolescent externalizing behavior beyond our proposed process.

This study’s findings demonstrate that being adopted alone is unlikely to explain an adolescent’s externalizing behavior. Although earlier descriptive research reported a direct association between adoption status and externalizing that was not replicated here (Juffer & van IJzendoorn, 2005; Keyes et al., 2008), this study’s findings demonstrate that the direct association is at least partially explained by a more complex, mediated process. This process is supported by other research showing that family characteristics account for substantial variance in adopted adolescent externalizing behaviors (Grotevant, Rueter, von Korff, & Gonzalez, 2011; Grotevant et al., 2006; Rueter & Koerner, 2008; Rueter, Koh, Grotevant, & Wrobel, 2011).

Our investigation examined both lower and higher order negative emotionality traits. We only found support for the lower order parent–adolescent aggression trait in our proposed process. Specifically, only aggression was associated with adolescent conflict and externalizing behaviors. No support was found for a conflict-mediated relationship between parent–adolescent traits and externalizing behaviors for the other three traits (alienation, stress reactivity, and negative emotionality).

Our dyadic measure of parent–adolescent traits may help with the interpretation of these findings. As previously defined, low levels of parent–adolescent negative emotionality traits were hypothesized to be adaptive and beneficial to adolescent functioning. We included both parent and adolescent dyadic negative emotionality traits in our tested family process. Our findings suggest that certain parent–adolescent aggressive trait combinations may be maladaptive (reflecting a poor dyadic trait fit) and negatively influence adolescent externalizing outcomes. Dyadic trait combinations are particularly relevant to adoptive families because parents and children are more likely to have dissimilar temperaments and more varied combinations of dyadic traits. Our findings go beyond previous research by suggesting that parent and child traits together contribute to a family process that seeks to explain externalizing behaviors.

A weakness of our findings is that we cannot claim support for dyadic effects, nor did we test for reciprocal effects. In addition, causation could not be determined.

FIGURE 2  Final Step 3 aggression model results. Note: N = 616. Associations specified but not pictured: age and (a) parent-adolescent dyadic trait ($b = .28, t = 6.27, p < .01$); (b) adolescent conflict ($b = .11, t = 2.18, p < .05$) and; (c) adolescent externalizing behaviors ($b = .22, t = 5.10, p < .01$); gender and (a) parent-adolescent dyadic trait ($b = .28, t = 6.27, p < .01$); (b) adolescent conflict ($b = .11, t = 2.18, p < .05$) and; (c) adolescent externalizing behaviors ($b = .22, t = 5.10, p < .01$); adoption status to adolescent externalizing behaviors ($b = - .09, t = - 2.09, p < .05$); ACEM = adolescent to mother angry coercion; ACEF = adolescent to father angry coercion; HSEM = adolescent to mother hostility; HSEF = Adolescent to father hostility; to determine direction of effects, adoption status (1 = adopted, 2 = non-adopted); gender (1 = male, 2 = female); CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual. *$p < .05$. **$p < .01$.  

Table 1  Summary of Model Fit Statistics.  

| Model Fit Statistics | $\chi^2_{ar-m}$ = 76.82, p < .01 | CFI = .98 | TLI = .97 | RMSEA = .04 | SRMR = .03 |

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Future longitudinal research with appropriate time intervals should test reciprocal effects. Future research should also test for the salience of dyadic traits over individual ones by demonstrating that the former are stronger predictors of adolescent behavior than either parent or child traits alone.

It is possible that our mediated family process could occur in a different order. Although we proposed a conceptual longitudinal process whereby parent–adolescent traits, adoption status, adolescent conflict, and adolescent externalizing were associated in complex patterns, we used cross-sectional data. Therefore, the direction of the effects could be other than what we proposed. For example, adolescent conflict and externalizing may be mediated by parent–adolescent traits. Yet earlier temperament traits develop into later personality (Rothbart, Ahadi, & Evans, 2000) and have been found to be relatively stable (Johnson, McGue, & Krueger, 2005) over time. Therefore, we argue that temperament exists before conflict and externalizing behaviors. Also, the mean age at adoption for the adolescents in our sample was 4.7 months ($SD = 3.4$ months). Therefore, adoption status was determined prior to any manifestation of these behaviors. Evidence that both temperament and adoption status come before adolescent conflict and externalizing behaviors provide strong support that our model is the more plausible explanation.

The strengths of our study warrant attention. A significant strength of the study is that we had a relatively large sample of both adoptive and nonadoptive families. Most adoption research tends to use relatively small samples that only include adoptive families, precluding them from making comparisons. Another strength of our study is that we used multiple data sources. Parent–adolescent traits were measured using parent and adolescent self-reports, adolescent conflict was measured using observational data, and adolescent externalizing behavior was measured using teacher and parent reports and diagnostic interviews. Use of observational data to measure adolescent conflict reduced method bias in its associations with parent–adolescent traits and adolescent externalizing behavior. Some method variance was reduced with the use of multiple reporters in our adolescent externalizing behavior measure. This method variance reduction increased our overall confidence in the findings.

**Limitations**

Limitations to this study’s generalizability should be noted. First, this investigation used an adolescent sample. Consequently, it is unknown if this process operates in families with younger or older children. Additional research is needed to test this process with these populations. Second, generalizability is limited to adolescents placed for adoption prior to 2 years of age. Our proposed process may work differently for children adopted at an older age. Finally, 66% of the adolescents in the sample were from international adoptions (predominantly Korean). Thus, the results are not generalizable to adoptees from other countries. Future research should include adoptive families with more varied regional, ethnic, racial, and placement backgrounds.

**Implications for Research, Policy, and Practice**

Results from this study highlight the importance of understanding how family processes (specifically, the role of adolescent conflict) contribute to adolescent externalizing behaviors. Contrary to previous research, we found that adoption status did not add to the explanation of adolescent externalizing behaviors beyond our proposed process. Conflict-mediated relationships between (a) parent–adolescent aggressive traits and externalizing behaviors, and (b) adoption status and externalizing behaviors suggest that conflict may serve a specific function in families. Although researchers agree that high levels of parent–child conflict (defined as frequent, high intensity conflict) are not beneficial to adolescent externalizing outcomes (Deković, 1999; Smetana, 1989), the quality of conflictual interactions potentially influences outcomes more than frequency or intensity alone (Eisenberg et al., 2008). In the context of positive parent–adolescent relationships, growth may occur through conflict-mediated processes. For example, recent research suggests that conflict may play a role in identity development (Lichtwarck-Aschoff, van Geert, Bosma, & Kunnen, 2008). Given the potential for growth from conflict, clinicians should consider the quality of parent–child relationships in determining intervention points for handling parent–child conflict. A better understanding of family processes that contribute to adolescent externalizing outcomes will help with the development of evidence-based clinical interventions aimed at reducing problem behavior and promoting healthy adolescent adjustment.

**REFERENCES**


Adoptive Mothers: Identity Agents on the Pathway to Adoptive Identity Formation

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University of Minnesota

Harold D. Grotevant
University of Massachusetts Amherst

Bibiana D. Koh and Diana R. Samek
University of Minnesota

The concept of identity agents provides a framework to examine adoptive mothers’ responsibility to address children’s dual connection to their birth and adoptive families. Adoptive mothers’ identity agency was assessed using case analysis. Eight extensive interviews with four adoptive mothers were collected at Waves 1 and 2 of a longitudinal study. Adoptees’ identity formation was measured at Waves 2 and 3. Adoptees were $M = 6, 13, \text{ and } 23$ years of age at Waves 1, 2, and 3, respectively. Analysis revealed strategies that adoptive mothers purposefully employ during their children’s childhood and adolescence to influence subsequent adoptive identity. Adoptive mothers who act as identity agents draw on their respective theories of identity formation to create opportunities to talk with their children about adoption.

Adoption legally transfers the care and custody of a child from the family of conception, birth, and biology to an expectant adoptive family. Through this process the adoptive family becomes forever linked to the child’s birth family (Reitz & Watson, 1992). This article examines one of the most complex and challenging tasks facing adoptive parents today: the responsibility to come to terms with and...
make decisions about the adoptive family’s connection to their child’s birth family. How adoptive parents navigate this task has important implications for adoptees’ identity formation (Grotevant & Von Korff, 2009).

A recent theoretical article on identity agents (Schachter & Ventura, 2008) provided a useful framework for considering how adoptive parents approach this task. Identity agents deliberately and actively interact with young people with the intention of participating in identity formation. The framework is theoretically grounded in the notion that identity formation is a joint project of identity agents and children rather than an individual accomplishment of the child. At the same time, the concept of identity agent does not “imply that these agents are sole agents replacing the developing individual’s agency, nor that the direction of influence is unidirectional” (Schachter & Ventura, p. 9). This framework is ideal for this study because it focuses analysis on links between adoptive parents’ efforts to (a) address connections between the adoptive and birth family, and (b) foster adoptees’ identity development.

Adolescence is a seminal period for identity development in Western cultures (Erikson, 1968; McAdams, 1985). It is a time when young people explore their goals, values, and beliefs, reconstructing past events in order to develop a coherent sense of identity (Polkinghorne, 1988; Waterman, 1993). This process is enhanced by normative cultural expectations that young people should be able to construct coherent stories about their individual process of identity formation by their mid-to-late twenties (Habermas & Bluck, 2000; McAdams, 2006).

Being adopted adds a layer of complexity to identity formation because adoptees must decide what it means to be connected to both an adoptive and birth family, and integrate their individual experience into coherent adoptive identity narratives (Grotevant, 1997; Grotevant, Dunbar, Kohler, & Esau, 2000; Von Korff, 2008). In developing adoptive identity narratives, young people elicit information, explore and contrast their views with those of others, and reflect on the meaning of adoption or being adopted. Recent changes in adoption practice encouraging contact between adoptive and birth family members have highlighted adoptive identity issues for adoptees (Freundlich, 2001; Melina & Roszia, 1993). In a recent study of adopted young adults (McGinnis, Smith, Ryan, & Howard, 2009), about 80% of respondents reported that adoptive identity had been “important” or “very important” to them.

Researchers and adoption professionals have agreed that adoptive parents have a responsibility to address the adoptive family’s connection to birth relatives (Brodzinsky & Pinderhughes, 2002; Kirk, 1964), yet there has been a debate about how adoptive parents should do so (cf. Callahan, 2007; Gritter, 1989). Some claimed that adoptive parents should actively participate in direct contact with one or more birth relatives, exchanging relatively frequent photos, letters, e-mails, telephone calls, and face-to-face visits. Others who also claimed contact is necessary believed it should be limited to an occasional photo or letter exchange. Some favored indirect contact through third parties so that identities need not be ex-
changed. In fact, some adoptive parents avoided contact because they had been
told that it is confusing for children and harmful to identity development (Kraft et
al., 1985). Yet others claimed that adoptive parents can accomplish this task in the
absence of contact (Brodzinsky, 2005). Despite these divergent claims, there has
been little research on processes that adoptive parents use to facilitate adoptive
identity formation (Freundlich, 2007).

In this study we use select cases, with and without contact between adoptive
and birth family members, to identify whether adoptive mothers act as agents of
adoptive identity and, if so, what processes they use to come to terms with the
adoptive family’s connection to the birth family. We examined adoptive mothers as
identity agents because mothers typically do family kinship work (di Leonardo,
1987). Nevertheless, as this study shows, adoptive mothers take different ap-
proaches regarding adoptive identity formation.

METHOD

Participants

Participants were drawn from a sample of 184 adoptive families participating in
the Minnesota-Texas Adoption Research Project (Grotevant & McRoy, 1998). The
full sample was recruited at Wave 1 through 35 adoption agencies located in all re-
gions of the United States. Adoption agencies received training on how to ran-
domly sample target adopted children in families with varying levels of contact be-
tween adoptive and birth family members. Target children met the following
criteria: (a) adoptees were between 4 and 12 years old; (b) the adoption took place
before the child’s first birthday; (c) the adoptive parents remained married
postadoption; and (d) the adoption had not been international, transracial, or “spe-
cial needs.” Adoptees were 4 to 12 years old ($M = 7.8$) at Wave 1, 11 to 20 years old
($M = 15.7$) at Wave 2, and 21 to 30 years old ($M = 25.0$) at Wave 3. The children
were placed for adoption at a mean age of 4 weeks and a median age of 2 weeks.

A subsample of four adoptive mothers and their target adopted children was
drawn from the full sample. We selected the adoptive mothers from two groups: (a)
adoptive mothers who facilitated the highest levels of contact with birth family
members throughout their children’s development, and (b) adoptive mothers who
did not facilitate contact. From each group, we selected the adoptive mother with
the youngest female target adopted child and the adoptive mother with the young-
gest male target adopted child. Adoptive mothers with young children were se-
lected in order to examine identity agency prior to adolescence. All four adoptive
mothers were married and their target adopted children were placed within 1
month of birth. At Wave 2, the adoptive mothers were in their forties, married, and
of Protestant faith. Adoptive mothers were not selected based on adoptees’ adop-
Adoptive identity formation scores (described below), and coders performing case analysis were blind to adoptive identity formation scores.

Procedures

Adoptive mothers participating in this study were interviewed privately in their homes when the target adopted children were between 4 and 6 years old (Wave 1) and again when they were between 11 and 14 years old (Wave 2). Interviews were transcribed verbatim. Procedures for Waves 1 and 2 have been published in detail elsewhere (Grotevant & McRoy, 1998; Grotevant, Perry, & McRoy, 2005). The University of Minnesota Institutional Review Board approved all consent procedures.

Adoptive mothers’ identity agency was assessed using case analysis (Creswell, 2007; Yin, 1994). Eight extensive interviews, two interviews (from Wave 1 and 2) with each adoptive mother, were analyzed. Case analysis is useful when researchers have a prior theoretical position, have multiple sources, and are investigating a contemporary phenomenon in context. Three coders independently read both interviews with each adoptive mother as a set, one set at a time. Each coder identified passages indicating one or more of the elements of identity agency (Schachter & Ventura, 2008): (a) concern and (b) goals for identity formation, regarding identity context or ego identity structure (c) actions taken to achieve those goals, (d) an implicit theory of adoptive identity development, (e) assessment of the young person and his or her context in order to assess the role of identity agent, and (f) reflexivity of the agent’s goals and actions to improve them. Coders noted which element the passage represented and why. Two coders met to discuss and prepare results, which are presented below. Results were verified by a third coder. Interview quotes were altered in a few instances in order to protect participants’ identities; meaning was preserved. Names and identifiers were changed or removed.

Measure of Adoptive Identity Formation

Adoptive identity formation was assessed using depth of adoptive identity exploration, which is the degree adoptees reflect on the meaning of being adopted and engage in information gathering about adoption. Depth of adoptive identity exploration was coded for the full sample of adoptees using adolescent (Wave 2) and young adult (Wave 3) interviews. Overall coder reliability was moderate, $\kappa_w = .57$ (Wave 2), and substantial, $\kappa_w = .74$ (Wave 3), according to standards by Landis and Koch (1977). Weighted kappas fully correct for chance agreement while also adjusting for the degree of disagreement between coders (Cohen, 1968). Procedures for coding adoptive identity have been published in detail elsewhere (Von Korff, 2008). Results for the four target adopted children are presented in this article.
RESULTS

Results are presented for each adoptive mother separately, discussing each element of identity agency in turn. The two adoptive mothers facilitating contact (Celia and Mandy) are presented first, followed by the two adoptive mothers who did not facilitate contact (Betty and Lindsey). At placement, Celia and Mandy agreed to exchange letters and pictures with the birth mother through the adoption agency, without identifying information being shared. Betty and Lindsey never had contact with the birth family. Results for target adopted children’s depth of adoptive identity exploration during early adolescence (Wave 2) and young adulthood (Wave 3) are presented at the end of each section.

Celia’s Synthesis of Concern, Goals, and Actions With Her Theory, Assessment, and Reflexivity

Celia’s narrative about contact and adoptive identity was remarkably similar at Wave 1 and Wave 2, despite the 8-year time span. Celia viewed the process of developing a sense of self as embedded in relational processes and developing over time. She believed that contact helped a child develop a sense of being “rooted” or connected to two families. Furthermore, at both waves, she expressed deep concerns about the relationship between such contact and her son’s (Lawrence) adoptive identity development.

It [no contact] gives a child no sense of identity, you know, you identify with your adoptive family, but it doesn’t matter how much you love them and how much you give them and how much they are—they find their place in the adoptive home, their roots are somewhere else, you know, I mean, they were [italics added] somewhere else, they’ve been uprooted, so, it’s nice to know where I used to be rooted and this is where I am now [italics added]. It doesn’t take away from the adoptive family.

Consistent with her concern for Lawrence’s future adoptive identity formation, Celia gradually and deliberately increased the type and frequency of contact over time, beginning when Lawrence was about 1 year old. By Wave 1, Celia had exchanged names and addresses with his birth mother and Lawrence had experienced multiple face-to-face meetings with birth relatives. Her decision to arrange visits was grounded in her theory, expressed at Wave 1, that adoptive identity formation involves a future period of exploration and that this developmental stage would be eased if Lawrence had opportunities to learn from and interact with his birth relatives. Celia stated that “I would worry tremendously, when that child got to be 13 or 14 and I could not give him some information. I would be pulling the hairs out of my head trying to find a way because this child means so much to me.”
Celia’s theory about contact and adoptive identity formation was formed, in part, while she reflected on her own experience of losing a parent when she was young. She relied on family members who knew her father to learn about him and about herself in the process:

You know, I’d want to know. I put myself in their place, I had a mother, but my father died before I was born. But I have a picture of him, I have stories about him from my grandmother that tells me he was funny, … I know what became of him, what his last day was like…. I know what he looked like, you know. I got a picture of him. And I know he loved my mother very much. And you know, these things are so important.

Celia expressed the belief at Wave 1 and Wave 2 that Lawrence needed to learn independently about himself in relation to others. Concerning the importance of children learning about biological roots, Celia wondered, “How can you [adoptive parent] give that to an adopted child if you don’t have it there to give?” Consistent with her theory, once reassured that Lawrence would be safe, Celia arranged for Lawrence to routinely visit his birth family members.

I think it’ll [contact] go into adulthood and I think that he will make his own contact with them, because as much as I care for them and everything, you know, the relationship isn’t really directly with me, you know, we talk and I’ll hug Ana [birth mother] every time I see her, but you know, I can go without any communication with them or anything.

Celia remained involved by helping her son maintain contact with his birth relatives and by helping him interpret his experiences, but believed that adoptive identity formation required the child to be part of the relationship building.

And little by little, he [Lawrence] realized who he was and what Ana was to him, because he knew [birth] grandma and [birth] grandpa and then Ana so, finally, one day, he came, and he said, “You know Ana’s my mother?” And he was a little, bitty guy. And I said, “Yes.” Ana had a lot to do with it. She kind of, you know, said it over there and made sure he understood and between the both of us it came kind of natural to him.

Celia assessed changes in the birth mother’s living situation and deliberately talked with Lawrence, at least once per month, to ensure he had opportunities to visit his birth mother when he visited his other birth relatives. Additionally, when birth relatives did not arrange visits several weeks in a row, Celia called to arrange visits with them on Lawrence’s behalf.

Compared to the other elements of agency, there are fewer examples of reflexivity in Celia’s transcript. Celia was confident about her concerns, goals, and action at Wave 1; by Wave 2 she took satisfaction, supported by affirmations from her
friends and family, that she was achieving her goals. According to Celia, Lawrence loved her, his adoptive family, and his birth relatives. She was confident that he had developed a strong sense of self.

To see him grow into a nice, young man, you know, he’s almost going on [age]. To see him so sure of himself, you know, I know a lot of it is in himself and I also know that I helped nurture that … so I’ve done a good job with Lawrence, that’s my satisfaction … and I’ve strived so hard for him to know that Ana loves him and Ana wanted the best for him, and he loves Ana and he loves me and that’s what I’ve worked so hard for.

Lawrence had a moderately low level of adoptive identity exploration during early adolescence but, by young adulthood, his level of adoptive identity exploration was high (in the top third of the full sample of young adult adoptees).

Mandy’s Synthesis of Concern, Goals, and Actions
With Her Theory, Assessment, and Reflexivity

Mandy’s concern about the influence of contact on adoptive identity developed gradually as she reflected on her identity as an adoptive mother, on her daughter’s (Nadine) developing sense of self, and on her family’s experience with contact. Mandy exchanged letters and pictures with Calley (Nadine’s birth mother) during Nadine’s first year of life, but had little contact again until Nadine was about 4 years old because “we just had to feel that we were secure in being the parents, we needed that time you know to have that child for ourselves, to not just be the caregiver to this child.” Mandy’s initial motivation to exchange letters was driven by her concern for Calley, “so that it would make the birth mother feel comfortable in the fact that the baby was being taken care of. Make her know that the baby was being loved and watched over.”

Mandy’s view of contact evolved over time. By Wave 1, she had begun to see contact as a way to learn about Nadine’s birth mother, thus reinforcing her identity as Nadine’s adoptive mother and mediating Nadine’s experiences of her birth mother. Consistent with her developing concerns about adoptive identity, Mandy gradually and deliberately increased the type and frequency of contact over time. By Wave 1, she had exchanged names and addresses and experienced multiple face-to-face meetings, and viewed herself as a critical conduit for experiences taking place between Calley and Nadine. She had renewed contact with Calley and developed a relationship with her, “I think you—as you grow and develop and love your children more and more—you want to be connected more with the source of where they came from.” Mandy repeatedly emphasized that she valued contact because it gave herself opportunities to learn from Calley: “[Contact] leaves out the guesswork; there’s an awful lot of guesswork that doesn’t have to be there if you
can communicate what you’re thinking. A lot of time expended on wasted questioning if you could just ask. Sometimes it’s a real short answer and then it satisfies.”

Like Celia, Mandy viewed the process of developing a sense of self as embedded in relational processes and developing over time. At Wave 1, Mandy said:

I don’t think that Nadine is real aware of exactly what Calley means in her life. She knows the term birth mother, and she knows what a birth mother is, but to her she’s just a really good friend. She’ll sit down to color a picture and say, “can I send this picture to Calley?” But she doesn’t talk about it like she is another mother to her. She is a good friend. I think that will come with age… .

I know that being the age, the young age that she is it maybe doesn’t concern her as much and maybe doesn’t stick with her in her mind as much; but it will. So there won’t be one day where we sit down and say, “Listen, you are 12 years old and now we want to tell you about Calley.” She is kind of a household name.

By Wave 2, Mandy had become a keen observer of the ways her facilitation of contact had influenced Nadine’s adoptive identity:

It [contact] molds her [Nadine] because she knows her birth mother, she’s more attached to the fact that she’s adopted and her birth mother than some of the other children who don’t know theirs… . Um and I think that’s part of being a girl, part of knowing who she is, so it plays a big part in her.

At Wave 2, Mandy had reassessed the relationship between contact and adoptive identity in response to experiencing Nadine’s adoptive identity exploration firsthand. Although Mandy had initiated contact by Wave 1, she had done so with reservations. At Wave 2, Mandy viewed Nadine’s exploration of contact as an important facet of Nadine’s adoptive identity: “She has a temperament that she would be really hard to live with if she didn’t get to see her birth mother, because she always wants to know more, she wants to find out more stuff.”

Mandy reflected at Wave 2 on the opportunities contact had given her to reinforce her own values and expectations as an adoptive parent:

[Contact] has also given us a real open door to talk about relationships and how God intended the relationships to be. So it has probably been a positive thing that it kept communication with us going as she turns a teenager.

Contact provided frequent opportunities for Mandy and her daughter, Nadine, to talk about adoption-related issues. They talked at least once a month, whenever Nadine had been thinking about her birth mother or when letters or presents from her birth mother arrived. At Wave 2, Mandy articulated that her facilitation
of contact with Nadine’s birth relatives had helped shape Nadine’s adoptive identity:

Because Calley still is a part of her, whether she is around or not. You know, I can’t pretend that I gave birth to the children, because I didn’t. I can’t tell them things about them that I don’t know…. There’s been [years] of her knowing who the birth mother is and finding out information about herself and I think that’s changed, uh, she loves her birth mom and I think that’s great. She sees the warts with it too so that, I, that’s part of Nadine’s maturity.

Nadine had a high level of adoptive identity exploration during early adolescence and young adulthood (in the top third of the full sample of young adult adoptees).

Betty’s Synthesis of Concern, Goals, and Actions
With Her Theory, Assessment, and Reflexivity

Betty held potentially contradictory views on adoptive identity formation. On the one hand, she said contact was harmful, “I mean, how do you explain to them, ‘Well, I’m your mother but this is your birthmother.’ I mean, it gets so confusing for the child.” Betty also feared contact might allow her son’s (Doug) birth mother to reclaim him. On the other hand, she believed adopted children should have information about birth parents in order to develop a coherent sense of self:

There’s going to be more questions and stuff come along and the more information you can give them [the better]—to make them to know and to be happy—because if they start looking … they’re trying to fill that emptiness or that one void.

Betty did not seek information about Doug’s birth family because she felt sufficient information had been provided at placement. She planned to share that information with Doug in the future. Betty’s goals were to help Doug (a) understand that he was an adoptee, and (b) develop a positive attitude about adoption. These goals were based on advice given by the adoption agency at placement, not on Betty’s implicit theory of identity development. Consistent with her goals, Betty started talking with Doug about adoption when he was about 4 years old. She explained, “You don’t want it [adoption] to just be sprung on him because that’s not fair to him. You know, let him try to understand a little bit at a time.” At the same time, Betty was concerned that it would be scary for Doug to learn about adoption because he might feel he had been rejected by his birth parents or become fearful he would have to leave his adoptive parents. At Wave 1, she assessed Doug’s needs and her goals and actions. She also modified the frequency and style of talking
about adoption with Doug, presenting adoption in an increasingly positive style so that Doug would feel positive about adoption.

By Wave 2, Betty was relatively unconcerned and unreflexive about adoptive identity. “in fact with Doug, why, you kind of sometimes even forget he’s even adopted” and “I just think Doug forgets he’s adopted, I really do. You know, that just doesn’t enter his mind.” Betty’s concern appeared to wane because she believed she had accomplished her goals. She assessed Doug’s relationships at home and school, and reported that he understood adoption and had a positive attitude about it. Doug (a) talked comfortably with others about adoption, (b) lacked sad or scary feelings about adoption, and (c) lacked interest in adoption or in searching for his birth family members. Betty said that “[Doug] has always been … very understanding about it [adoption], but I don’t think he has never, it has never ever really bothered him about being adopted, you know.” The most striking example of Betty’s lack of reflexivity was her portrayal of Doug as disinterested in adoption while simultaneously stating that Doug was interested in—and asked questions about—connections to his birth family. Also striking was Betty’s warning to Doug about contact when he asked her about birth relatives. She told him that “you got to remember, Doug, that you don’t know for sure if they would want to see you. You got to remember that, that if you contact—so you contacted them that maybe they wouldn’t want to see you.”

Doug had a moderately low level of adoptive identity exploration during early adolescence and a low level of adoptive identity exploration in young adulthood (in the bottom seventh of the full sample of young adult adoptees).

Lindsey’s Synthesis of Concern, Goals, and Actions With Her Theory, Assessment, and Reflexivity

Lindsey had several theories about adoptive identity formation. First, she theorized that self-knowledge about adoption played a role in identity formation: “I feel like the more she [Karen, adopted daughter] knows about herself, the better she’ll be able to relate and to adapt to situations and all.” Second, she theorized, even as early as Wave 1, that adolescent adoptive identity exploration, particularly exploring connections with birth relatives, might interfere with other identity formation processes.

But my biggest concern is when they get to be adolescents because at that particular time they’re starting to seek out who they are and I don’t know if it’s really fair to be—to all of a sudden have them bombarded with all this “I’m adopted. Who are my real parents?” I mean, they’re already trying to figure out who they are and what their relationship is, you know, “Why am I here? Where am I going?” and all this and then to have this other thing about being adopted and you know, “What am I really like? Who are my parents really like?” … I mean, they’re having a hard enough time just
trying to get themselves together being just adolescents without having all that dumped on them too.

Finally, Lindsey theorized that aspects of adoptive identity, including a sense of connection to an adoptive and a birth family, could be explored in tandem with religious identity.

That the Lord went through a lot of—went through a process—to select the right situation with the right birth parents, bringing her [Karen] into the right adoptive parent situation. So, I think that she feels that, because the Lord went through a lot of trouble to put her here, that—the sense that, the family’s special… . But, I, so I think that just their belief, you know, that the Lord is sovereign over their situation and that he’s going to take care of them and put them in the best situation.

Lindsey’s concerns, goals, and actions were consistent with her several theories. Lindsey ensured that Karen understood she was adopted: “From the very beginning when she was in the crib we told her she was adopted.” Furthermore, Lindsey tried to nurture Karen’s adoptive identity exploration during childhood by providing developmentally appropriate information about her adoption, even though the information was limited, and by giving Karen opportunities to express her curiosity about her adoption and birth family.

Lindsey took action in Karen’s childhood to prevent adoptive identity exploration from taking center stage during adolescence: “It seems like if it’s a big secret they may want to—then that stirs up their curiosity more than if it’s just kind of matter of fact, this is the way it is.” Lindsey also used her religious beliefs to help Karen make sense of adoption. “Of course, our feeling has always been because of our belief in God and how he’s, how he cares for his children and how he’s put us together and all.” She assessed Karen’s development using an implicit theoretical stance consistent with her religious beliefs about adoption: “Most parents have no choice as to who they get. Whereas they [our adopted children] realize they were chosen to be in our family. And they feel in one sense they’re maybe a little bit more special than if they would have been, you know, born in the family.” Lindsey also assessed other aspects of Karen’s adoptive identity, reconsidering her goals and actions in the process: “Sometimes I feel like maybe we should seal things [records] but then she’s [Karen] accepted everything so well that everything’s gone okay.”

Lindsey also demonstrated reflexivity. She observed that Karen was curious about her birth mother and might want to search for her. Lindsey also expressed fear that Karen’s birth mother might replace her in some way. At the same time, she stated that her fears were unreasonable because she (Lindsey) was Karen’s mother in Karen’s mind and heart. Lindsey felt it was important to try to come to terms
with her fears so she could support Karen’s adoptive identity exploration, consistent with her own theories, instead of acting on her fears.

Lindsey had a high level of adoptive identity exploration during early adolescence and young adulthood (in the top third of the full sample of young adult adoptees).

**DISCUSSION**

Case analysis of adoptive mother interviews provided substantial evidence that adoptive mothers act as adoptive identity agents and revealed ways that adoptive mothers use contact with birth family members to facilitate adoptive identity formation. Results for the two adoptive mothers who facilitated contact (Celia and Mandy) and one of the adoptive mothers who did not (Lindsey) contain rich examples of identity agency. Like Lindsey, Betty did not facilitate contact, but Betty’s results reveal little evidence of identity agency. At young adulthood, adoptees’ depth of adoptive identity exploration results were consistent with adoptive mothers’ identity agency results. Lawrence (Celia’s son), Nadine (Mandy’s daughter), and Karen (Lindsey’s daughter) all had equally high levels of depth of adoptive identity exploration while Doug (Betty’s son) had a low level of exploration.

Celia, Mandy, and Lindsay acted as adoptive identity agents in three ways. First, consistent with an identity agent theoretical framework, Celia, Mandy, and Lindsey (a) expressed deep concerns and felt responsible about their children’s adoptive identity development, (b) developed specific goals to fulfill their responsibility, and (c) acted on their concerns and goals. Celia and Mandy did so by facilitating contact with their children’s birth relatives and by helping their children interpret their experiences. Lindsey drew on her religious beliefs to help Karen explore her connections to both her adoptive and birth family. Celia and Mandy discussed the dilemma posed by taking responsibility for their children’s adoptive identity development, given their lack of knowledge and personal experience with their birth stories. They felt their children needed these stories to develop a coherent sense of self as adopted persons.

Second, as adoptive identity agents, Celia and Mandy deliberately wove complex adoptive and birth family relationships—and the meanings associated with them—into the fabric of everyday experience. Lindsey used religion to support her daughter’s interest in the meaning of adoption and her connection with her birth family, despite the lack of contact.

Finally, Celia, Mandy, and Lindsey drew on their respective theories of adoptive identity formation to create opportunities to talk with their children about adoption. Lindsey was motivated to fulfill her daughter’s desire for information about her birth family so that adoptive identity formation would not interfere with her overall identity development. Celia and Mandy sought to guide their children’s
interpretation of their experiences with birth family contact. The use of conversation expressly for the purpose of identity formation is consistent with narrative theory. Interactions provide a powerful day-to-day social context for narrative exchange (Pasupathi, 2001), and a large body of theory and empirical research has proposed that conversation shapes recollections and narrative identity (Berger & Kellner, 1964; Holstein & Gubrium, 2000). Previous research (Neil, 2009; Von Korff, 2008; Wrobel, Kohler, Grotevant, & McRoy, 2003) also suggested that contact, particularly face-to-face contact, is positively associated with adoption conversation.

Implications for Practice and Research

The theoretical framework of identity agents was useful in identifying the work that adoptive mothers do to address the adoptive family’s connection to the child’s birth family in the interest of adoptive identity formation. Identity agency has implications for children’s identities as well as parents’ identity formation. Mandy’s case reveals that contact can be a powerful mechanism for adoptive mothers’ identity formation. Reciprocal effects between identity formation and identity agency need to be explored as researchers seek to assess identity agency or try to capture the effects of identity agency on young children as they unfold over time.

Lindsey’s concerns for adoptive identity coexisted with her concerns for religious identity, which suggests that future research should explore alternative ways (other than contact with birth family members) in which adoptive parents act as adoptive identity agents. This is consistent with Brodzinsky’s (2005) suggestion that adoptive parents can forgo contact with birth relatives if they are willing to “consider the meaning of adoption in their lives, to share that meaning with others, to explore adoption related issues in the context of family life, to acknowledge and support the child’s dual connection to two families” (p. 149).

Future studies should also examine the relationship between adoptive identity agency and the ability of adoptive parents to manage fears in relation to the adoptive family’s connection to the birth family. Finally, all mothers recruited to this study were married. But, even though mothers often take the lead in kinship work, their partners may have ideas of their own that call for further examination.

This report is significant in that (a) it applies a new theoretical framework to examine the processes that adoptive mothers use to foster adoptees’ identity formation, and (b) it includes reports from adoptive mothers collected before the seminal period of identity formation. Nevertheless, these results cannot be used to generalize to a population.

There are no widely agreed on road maps for adoptive identity agents as they engage in kinship work, much less as they negotiate contact with birth families. Adoptive parents who have facilitated contact generally have been satisfied with it (Berry, Cavazos Dylla, Barth, & Needell, 1998; Ge et al., 2008; Grotevant &
McRoy, 1998) but, as these data show, it is not a simple matter to incorporate contact with birth relatives into adoptive family life. Furthermore, as this study showed, contact with birth relatives is only one of many pathways available to adoptive parents who act as agents of adoptive identity. Our closing words come from Mandy who asked researchers and adoption practitioners to allow families to make their own decisions about contact, on a case-by-case basis, based on the identity formation needs of their children: “Our idea of open adoption now as compared to when we first started is a completely different view. I think we’ve learned, as well as the agency, about open adoption. It can’t be pushed on anybody; you have to feel real comfortable yourself … everybody’s different.”

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