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Adoptees' Contact with Birth Parents in Emerging Adulthood: The Role of Adoption Communication and Attachment to Adoptive Parents

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As adoptees transition to adulthood, their roles in the family may shift, providing them with opportunities to have increasing autonomy in their decisions about contact and initiating conversations about adoption. Research has often focused more on adoptees as children, yet in emerging adulthood, there are important shifts in the life roles and relationships of adoptees during which adoptive parents continue to be meaningful. This study examined associations among attachment and communication within the adoptive family during adulthood with emerging adult adoptees' experience of birth family contact (frequency of and satisfaction with birth family contact), in a sample of 167 emerging adults with varied contact with birth family (from no contact to frequent contact). Results suggest that perceptions of secure parent–child attachment relationships, as well as sensitive and open communication with adoptive parents about adoption, continue to be important for emerging adult adoptees and lead to greater satisfaction for adoptees with birth parent contact—regardless of whether adoptees actually have birth family contact. In particular, positive family communication about adoption during adulthood was predictive of satisfaction with birth parent contact. Limitations and implications are discussed.

Keywords: Adoptees; Family Adoption Communication; Emerging Adulthood; Birth Parent Contact

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INTRODUCTION

A lthough trends toward openness in adoption (i.e., contact and information sharing between birth and adoptive families) have increased over time, controversy surrounding birth family contact continues (Grotevant, 2012; Siegel, 2012). One common assumption is that adopted children will seek out birth relative contact only when there is difficulty with the adoptive family. However, available evidence suggests the opposite (e.g., Wrobel, Kohler, Grotevant, & McRoy, 2003). It appears that it is the adoptees with positive

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relationships with adoptive parents, and who talk openly about adoption in their families, that have greater satisfaction with birth family contact (Howe, 2001; Wrobel et al., 2003).

Sensitive, open family communication about adoption is important to adoptees' adjustment in childhood and adolescence (Brodzinsky, 2006; Levy-Shiff, 2001), and the importance of secure attachment relationships between children and parents is welldocumented, including those in adoptive families (Feeney, Passmore, & Peterson, 2007). Communicative openness about adoption within adoptive families has been found to be positively associated with having greater birth family contact (Brodzinsky, 2006; Neil, 2009), and some evidence points to greater birth family contact among adoptees with secure attachments to their adoptive parents (Howe, 2001). Less is known, however, about these topics among adoptees in emerging adulthood. Some evidence with emerging adult adoptees indicates that family adoption communication is important to adoptive identity (Skinner-Drawz, Wrobel, Grotevant, & Von Korff, 2011), and that emerging adult adoptees with greater birth family contact are also more satisfied with that contact, consistent with earlier research (Farr, Grant-Marsney, Musante, Grotevant, & Wrobel, 2014). The purpose here is to examine how adoptees' attachment to adoptive parents and family adoption communication are related to birth parent contact during emerging adulthood. We specifically tested whether adoptees' reports of greater closeness and better communication with adoptive parents would be predictive of greater birth parent contact in emerging adulthood, as well as greater satisfaction with contact.

Openness in Adoption and Birth Family Contact

Adoptive placements range from closed or confidential (i.e., no identifying or contact information is shared) to open or fully disclosed adoptions (i.e., birth and adoptive families exchange identifying information and are able to directly contact each another). Contact can be initiated by adoptive or birth relatives and it can be mediated by a social worker or adoption agency staff. Birth family contact can range in how much information is shared, its frequency, and how many members of the adoptive or birth family are involved (and this may vary over time, as well). Available evidence about openness in adoption indicates that there is no one successful approach to contact between birth and adoptive families (Grotevant, 2012). Rather than a "one size fits all" description, multiple factors affect patterns of birth family contact over time and how it influences all persons involved, including adoptees, adoptive parents, and birth relatives (i.e., the adoption triad). Nonetheless, the literature demonstrates that contact is generally linked with positive outcomes in adjustment and relationships among the adoption triad (Siegel, 2012).

While openness in adoption has increasingly become a common practice, this was not the case for many years. Throughout the early 1900s, the prevailing pattern in adoption in the United States was to complete closed, confidential adoptions with sealed birth certificates to buffer adoptees and birth mothers from the stigma of "illegitimate birth" and adoptive parents from the stigma of infertility (e.g., Siegel, 2012). By the 1960s, however, a critical mass of adoptees and birth mothers had come forward to disclose how secrecy surrounding their adoption and relinquishment of their child, respectively, had been deleterious to their lives (Siegel, 2012), Furthermore, into the 1970s, a number of societal and cultural shifts in the United States related to decreasing adoption stigma, issues regarding abortion, and increasing availability of reliable contraceptives also influenced dynamics of adoption (e.g., Carp, 1998; Kahan, 2006). Over the 1980s and 1990s, openness in adoption increased. Currently, the vast majority (up to 95%) of adoption agencies who place infants via domestic, private adoption offers options for openness arrangements between birth and adoptive families (Siegel & Smith, 2012). Even so, openness in adoption does remain somewhat controversial, and continued research is necessary. Emerging adulthood is a noteworthy period of development to assess dynamics of openness in adoption. Although all emerging adults continue to develop autonomy and explore life roles (e.g., Arnett, 2007), many adopted adults also may seek out and face decisions about contact with birth relatives during this time. At age 18, many adoptees gain the legal right to their adoption records and/or birth family contact (specific rights granted vary by state) (Howard, Smith, & Deoudes, 2010). Changes in legal status may offer new opportunities for contact among some adoptees, changes in an established pattern for others, and still for some, no changes in openness arrangements (Farr et al., 2014). Transitions among family and personal relationships during emerging adulthood also likely influence adoptees' experiences with birth family contact, but no research to our knowledge has directly addressed this issue.

Family Adoption Communication

Few studies have examined the influence of family adoption communication on emerging adult adoptees' outcomes (e.g., Skinner-Drawz et al., 2011), but several have addressed this topic among adolescent adoptees and show consistent results with those of Skinner-Drawz et al. For instance, Hawkins et al. (2007) found, in their study of 122 international and 40 domestic adoptees, that adoption communicative openness between adolescents and adoptive parents was significantly associated with adoptees' more positive feelings about their adoptive identity and self-esteem. Similarly, Le Mare and Audet (2011) found, in their sample of 80 adolescents adopted from Romanian institutions, that adoptive parents' greater communicative openness was significantly associated with adoptees' more positive identities.

Several studies have also examined the influence of family adoption communication on adoptees' experiences of birth family contact during middle childhood and adolescence, but none (to our knowledge) during emerging adulthood. Brodzinsky (2006) found that children's reports of greater adoption communicative openness in their families were associated with greater birth family contact, as well as with children's greater self-esteem and fewer behavior problems among 73 adoptees in the United States, ages 8–13 years (M = 11.1). In contrast, in a study of 62 adoptees in the United Kingdom, ages 5–13 years old (M = 8.5), Neil (2009) found no significant correlations of birth family contact or family adoption communication openness with children's externalizing problems. She did, however, uncover that families' adoption communication was significantly positively correlated with birth family contact. Similarly, Wrobel et al. (2003) discovered that when adolescent adoptees (N = 156, $M_{age} = 15.6$ years, range = 11–20) had more information about their birth parents, adoptees also had more active communication with their adoptive parents about adoption.

Satisfaction with birth family contact has been another key variable in research examining the role of birth family contact and the importance of open adoption communication in influencing a variety of child and family outcomes. In one study of 177 adoptees $(M_{age} = 8.0 \text{ years}, \text{ range} = 4-13 \text{ years})$, children who had adoptive placements characterized by greater openness also reported greater satisfaction with contact, likely due to greater information access and birth family communication (Wrobel, Ayers-Lopez, Grotevant, McRoy, & Friedrick, 1996). Satisfaction with birth family contact has also been linked with externalizing behaviors among adolescent adoptees, such that greater satisfaction with contact was predictive of fewer externalizing problems (Grotevant, Rueter, Von Korff, & Gonzalez, 2011). How adoptive parents communicate with their children about adoption is likely to play a critical role in adoptees' satisfaction with contact arrangements with birth relatives over time, regardless of whether adoptees actually have contact. Thus, we sought to examine the role of family adoption communication among adult adoptees, since in adulthood, adoptees are able to make their own decisions about pursuing contact with birth relatives and about how much to involve adoptive parents in these decisions.

Adoptive Parent–Child Attachment Relationships

Because adoption involves a shift in a child's primary relationships, adoptees have been purported to be at risk for difficulties in attachment (Palacios & Brodzinsky, 2010), and thus attachment relationships between adoptees and their adoptive parents have been of interest in the adoption literature (e.g., Jaffari-Bimmel, Juffer, van IJzendoorn, Bakermans-Kranenburg, & Mooijaart, 2006; Juffer, Bakermans-Kranenburg, & van IJzendoorn, 2005; Stams, Juffer, & van IJzendoorn, 2002; Vandivere & McKlindon, 2010). In one of the few studies of adult adoptees, Feeney et al. (2007) examined how attachment security influences adult relationship outcomes among a sample of adults adopted as infants (N = 144) and a comparison group of nonadoptees (N = 131). While adoptees reported greater attachment insecurity than did nonadoptees, attachment security was more strongly associated with relationship outcomes (e.g., loneliness, relationship quality) than with adoptive status among the whole sample. Importantly, attachment security was assessed in relation to how participants felt in "close relationships," which may or may not have included feelings of attachment to parents (i.e., adult adoptees may have primarily considered romantic partners, if applicable, in responding to questions about close relationships).

More directly assessing variables related to adoption experiences, Irhammar and Bengtsson (2004) conducted a study of 40 adult adoptees ($M_{age} = 28$ years, range = 25–34) in Sweden who had been adopted internationally. Insecure attachment styles were associated with less birth family contact and greater desire to know more about biological origins. Howe (2001) also explored adult adoptees' attachment relationships, specifically with their adoptive parents, and associations with current levels of birth family contact. The sample (N = 472) represented domestic adoptive placements within the United Kingdom, and adoptees varied in their age of adoptive placement. Similar to Irhammar and Bengtsson's (2004) results, Howe found that those adoptees placed at older ages were more likely to describe attachment insecurities with their adoptive mothers and less likely to report high-frequency birth mother contact. Thus, it appears that evaluating attachment relationships among adult adoptees is important to understanding a variety of outcomes and relationship dynamics experienced by adoptees in adulthood.

The Current Study

This study examined whether more open adoption communication and more positive perceptions of attachment relationships within the adoptive family during emerging adulthood would be associated with adoptees' more frequent and more positive feelings about birth parent contact. We considered family adoption communication and attachment relationships separately with adoptive mothers and fathers to account for unique variations among emerging adult adoptees' relationships with individual parents. Variables about birth parent contact included frequency of and satisfaction with contact, with reports about both birth mothers and fathers.

We had four main hypotheses: (1) We expected that more sensitive and open adoption communication between emerging adult adoptees and their adoptive parents would be significantly associated with adoptees' greater satisfaction with birth parent contact, but not necessarily the frequency of contact. (2) Based on previous research, greater attachment to adoptive parents would be associated with greater satisfaction with birth parent contact and greater overall frequency of birth parent contact (e.g., Howe, 2001; Irhammar & Bengtsson, 2004). (3) Moreover, greater attachment to adoptive parents in emerging

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adulthood would be significantly associated with more positive family adoption communication, as relationship quality has been positively associated with attachment security among adult adoptees (Feeney et al., 2007). (4) Since male and female adoptees sometimes differ in domains of identity and their emphasis on personal relationships (Grotevant et al., 2007), we expected sex differences. In several studies, girls have demonstrated more interest than boys in aspects of their adoption (e.g., Hawkins et al., 2007).

METHOD

Participants

The Minnesota-Texas Adoption Research Project (MTARP) is a mixed-method, longitudinal study that began in the mid-1980s to explore dynamics of openness in adoption (Grotevant, McRoy, Wrobel, & Ayers-Lopez, 2013). The original sample included 190 adoptive families with children (N = 171, M = 8 years, range = 4–12) at Wave 1. There have been two additional waves of data collection when adoptees were adolescents (Wave 2) and emerging adults (Wave 3), respectively. At Wave 2, 156 adoptees participated (75 boys, 81 girls) and they were between 11 and 20 years old (M = 16 years). All families were recruited from 35 private domestic agencies in 23 states, were predominantly White, and all had completed same-race, infant adoptions. The sample was purposefully homogenous across a variety of demographic characteristics, as the primary variable of interest was openness in adoption. Substantial variation characterized the openness arrangements of families at Wave 1, and has continued to across subsequent waves of data collection (Grotevant et al., 2013).

In Wave 3, which is the focus of this article, 167 emerging adult adoptees participated. The sample of adoptees was 51% male (N = 86 males, 81 females) and they were a mean age of 25 years (range = 21–30). The majority were employed (84.4%), lived in their own apartment or house (75.3%), and paid all their housing expenses (55.6%). Approximately a third had college degrees (33.9%) and an additional third were currently enrolled in college classes (33.2%). A fifth of adoptees were married (20.6%) and another fifth had at least one child (20%). Of the Wave 3 total sample of 167, 70 adoptees (42% of emerging adult adoptees) had some current contact (i.e., within the previous 2 years) with birth relatives (usually birth mothers). This contact was through a variety of means, such as phone calls, in-person visits, emails, photos, etc. In contrast, 97 (or 58%) of the 167 adoptees at Wave 3 had no recent contact (in other words, most adoptees did not have contact with birth families in emerging adulthood, but a substantial minority did.) Adoptees also were relatively satisfied with contact with birth parents during emerging adulthood, but those with greater openness reported greater satisfaction with contact with birth mothers and birth fathers (Farr et al., 2014).

Materials and Procedure

Adoptees participated in a semistructured interview about their adoption and birth family experiences, responded to a series of online questionnaires regarding their relationships with their adoptive parents, and reported on demographic information about their employment, school history, living arrangements, and relationships. Both the interviews and selfreport questionnaires were delivered via a secure online data collection system designed for Wave 3 of MTARP. Each participant was assigned a unique username and password that provided access to the consent forms, questionnaires, and interviews. Interviewers and participants "met" online for two to three confidential sessions (chats) that ranged in duration from 1 to 3 hours. Interviewers included project investigators and advanced graduate students who had received extensive training. Alternatively, some participants (n = 30) took part in a phone interview equivalent to the online version, and several adoptees (n = 18) completed hard copy surveys identical to the online questionnaires, which were mailed back to the researchers. Compensation for emerging adult adoptee participants was \$150 total, \$75 each for the surveys and for the interviews at Wave 3. The Institutional Review Boards of the University of Minnesota and the University of Massachusetts Amherst approved this study.

Family adoption communication

We assessed communication about adoption within adoptive families by having adoptees complete the "Adoption Communication Scale" (ACS) in Wave 3 as emerging adults. Participants responded to items in reference to adoption communication with their adoptive mothers (14 items) and fathers (14 items) (modified from Brodzinsky, 2005) using a five-point Likert-type scale. An example item from this scale is, "My mother is a good listener when it comes to my thoughts and feelings about being adopted." Higher ratings on this scale reflect greater openness of, or higher quality communication, within families about adoption. Brodzinsky (2006) found means of 3.95 on this scale among 8- to 13-yearold children adopted within the United States. Internal consistency reliabilities (Cronbach's alpha) for the ACS were .94 and .96 for adoptive mothers and fathers respectively.

Attachment relationships

Current feelings of attachment security to adoptive parents were assessed during emerging adulthood using the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987). The IPPA focuses on participants' perceptions of trust, communication, and alienation in their relationships with mothers and fathers separately (e.g., "My mother respects my feelings," and "My father has his own problems, so I don't bother him with mine"). The development of the IPPA was guided by attachment theory, originally formulated by Bowlby (Armsden & Greenberg, 1987). The IPPA consists of 25 self-report items each for the mother, father, and close friends subscales; on a 5 point Likert-type scale, 1 = "Almost never or never true" to 5 = "Almost always or always true". Three week test-retest reliabilities for the original version of the IPPA were .93 for parent attachment and .86 for peer attachment. Internal consistency reliabilities (Cronbach's alpha) of attachment were .87 for mother and .89 for father, as assessed by the authors of this measure (Armsden & Greenberg, 1987). These reliabilities were similar for the current sample, .87 for mother and .89 for father.

Birth family contact

At Wave 3 of MTARP, semistructured interviews were conducted with emerging adult adoptees by trained personnel. Participants recounted their adoption stories through a series of specific questions. Adoptees reported on their current openness arrangements with birth family, which included discussion of the frequency of contact, and with whom contact was occurring. Frequency of contact was coded into categories ranging from "no current contact," to "rarely," to "occasionally," to "often," to "frequently." Adoptees were also specifically asked about their degree of satisfaction with their openness arrangements, regardless of how much contact had occurred. Responses from the entire interview transcript were globally coded for satisfaction with birth family on a 0 to 4 scale, with 0 indicating *very dissatisfied* to 4 indicating *very satisfied*.

Interview transcripts about satisfaction with and frequency of birth relative contact were coded by trained personnel (i.e., principal investigators, graduate students, or advanced undergraduate research assistants), for which moderate or high inference levels were needed. Agreement of .80 was established as acceptable reliability. Before doing independent ratings, all coders were required to attain this reliability level. At Wave 3, 40% of interviews were double-coded, and coders met periodically to resolve any disagreements in ratings. Final ratings were selected only after consensus was reached between the two coders and were evaluated by the coding supervisor. Throughout the coding process, inter-rater reliability was monitored.

RESULTS

First, descriptive findings about emerging adult adoptees' family adoption communication and attachment are presented. Next, associations among birth parent contact, family adoption communication, and perceptions of attachments to adoptive parents are discussed to examine our first three research questions about the interrelationships among these variables. Finally, we address our fourth research question about the role of adoptee's sex, and examine the relative roles of attachment to adoptive parents and family adoption communication in influencing birth parent contact by presenting the results of several regression models.

Descriptive Results

$Family \ adoption \ communication$

Emerging adult adoptees reported positive communication with adoptive mothers (M = 4.25, SD = .83, range = 1.14-5) and adoptive fathers (M = 4.04, SD = .96, range = 1.29-5). With a possible maximum score of five on each item, most adoptees reported high quality communication with their adoptive parents. However, results from a paired *t*-test revealed that emerging adult adoptees reported significantly more positive adoption communication with adoptive mothers than fathers, t(146) = 3.91, p < .001. Neither adoptee sex nor age were significantly associated with family adoption communication.

Adoptive parent-child attachment relationships

Emerging adult adoptees reported relatively positive perceptions of attachment to their adoptive mothers, M = 103.97, SD = 17.86, and to their adoptive fathers, M = 102.32, SD = 19.94 (out of a maximum total score of 125). In other words, adoptees reported an average of 4.16 (out of 5) with regard to attachment to adoptive mothers and an average of 4.09 (out of 5) with regard to attachment to adoptive fathers. As a 4 on this scale indicates "often true" and 5 indicates "almost always or always true," and adoptees exceeded a mean of 4 on a 5-point scale, this suggests positive perceptions of attachment security to adoptive mothers and fathers. These scores are comparable, and even somewhat higher, than those of other samples of young adults in which the total scores for parent attachment on the IPPA measure were examined. For instance, in a sample of 74 college students ($M_{age} = 21$ years), McKinney (2002) found that mean scores for mother attachment were 102.92 (SD = 20.15) and for father attachment, mean scores were 93.56 (20.15). In addition, we found no significant differences in perceptions of attachment to adoptive mothers versus adoptive fathers. Neither adoptee sex nor age were found to be significantly associated with perceptions of attachment to adoptive parents.

Associations among Family Adoption Communication, Adoptive Parent–Child Attachment, and Birth Parent Contact

Table 1 presents correlations among all variables of interest. With regard to our first hypothesis about associations among family adoption communication and birth family contact, we found that communication within adoptive families was unrelated to the frequency of birth parent contact, as reported by adoptees. However, satisfaction with contact was significantly related to family adoption communication such that positive

	Adu	lthood					
Variable	1.	2.	3.	4.	5.	6.	7.
1. Attachment to mother	_						
2. Attachment to father	.66***	_					
3. Communication with mother	.69***	.63***	_				
4. Communication with father	.55***	.79***	.75***	-			
5. Frequency of birth mother contact	.03	09	.08	.03	_		
6. Frequency of birth father contact	.11	07	.01	09	.43***	_	
7. Satisfaction with birth mother contact	.06	.07	.18*	$.14^{\dagger}$.24**	.21*	_
8. Satisfaction with birth father contact	.20*	.18*	.31***	.23**	04	$.14^{\dagger}$.52***

TABLE 1 Correlations among Variables of Adoptive Family Dynamics and Birth Parent Contact in Emerging Adulthood

Note. Pearson product moment correlations calculated for all variables.

 $^{\dagger}.05$ *<math>p < .05.

p < .05.**p < .01.***p < .001.

communication with adoptive mothers was associated with greater satisfaction with contact with birth mothers, r(151) = .18, p = .027, and with birth fathers, r(149) = .31, p < .001. In addition, positive communication with adoptive fathers was associated with greater satisfaction with contact with birth fathers, r(147) = .23, p = .006, and marginally significant with birth mothers, r(149) = .14, p = .091. Thus, our first hypothesis that family adoption communication in emerging adulthood would be significantly (yet moderately) related to adoptees' satisfaction with (and not frequency of) birth family contact was supported.

Contrary to our second hypothesis, we found that emerging adult adoptees' perceptions of attachment to adoptive mothers and to adoptive fathers were not significantly associated with adoptees' frequency of contact with birth mothers or with birth fathers during emerging adulthood. With regard to *satisfaction* with birth parent contact as related to attachment relationships, adoptees' greater feelings of closeness to adoptive mothers in emerging adulthood were significantly associated with satisfaction with birth father contact, r(146) = .20, p = .018, but not with birth mother contact. A similar pattern was found with regard to emerging adult adoptees' reports of attachment to their adoptive fathers and satisfaction with birth parent contact. While attachment to adoptive fathers was unrelated to satisfaction with birth mother contact, emerging adult adoptees who reported greater perceptions of closeness to their adoptive fathers also reported greater satisfaction with birth father contact, r(144) = .18, p = .033. Thus, our second hypothesis was partially supported—although frequency of birth parent contact and satisfaction with birth mother contact appeared unrelated to emerging adult adoptees' attachments to their adoptive parents, satisfaction with birth father contact in particular was significantly, but moderately, positively associated with adult adoptees' perceptions of attachment to both adoptive mothers and fathers.

Consistent with our third hypothesis, attachment relationships and family adoption communication were also found to be significantly associated with one another: Perceptions of attachment to adoptive mothers were positively associated with greater family adoption communication in emerging adulthood, r(151) = .69, p < .001. Likewise, perceptions of adoptive father attachment were positively associated with greater family adoption communication, as reported by emerging adult adoptees, r(149) = .79, p < .001.

		Conta	ct						
	Satisfaction with Birth Mother Contact				Satisfaction with Birth Father Contact				
Variable	В	SE (B)	β	t	В	SE (B)	β	t	
(A)									
Attachment: adoptive mother	01	.01	11	95	01	.01	07	64	
Communication: adoptive mother	.30	.17	.20	1.81^{\dagger}	.48	.15	.34	3.15**	
Presence of birth mother contact	.50	.20	.20	2.47*	_	_	_	_	
Presence of birth father contact	-	_	_	_	.75	.29	.21	2.64^{**}	
Adoptee sex	32	.20	13	-1.58	40	.18	17	-2.18*	
Adoptee age	.04	.05	.07	.81	02	.05	03	34	
R^2	.09				.16				
F(5, 141)	2.87*				5.50*	**			
(B)									
Attachment: adoptive father	01	.01	02	12	.01	.05	.02	.23	
Communication: adoptive father	.16	.18	.12	.89	.28	.16	.23	1.72^{\dagger}	
Presence of birth mother contact	.57	.21	.22	2.71^{**}	_	_	-	-	
Presence of birth father contact	-	_	-	-	.71	.31	.18	2.26*	
Adoptee sex	34	.21	14	-1.66^{\dagger}	43	.19	18	-2.22*	
Adoptee age	.07	.05	.10	1.21	.01	.05	.02	.28	
R^2	.09				.12				
F(5, 139)	2.86*				3.61*	*			

TABLE 2
Summary of Multiple Regressions onto Emerging Adult Adoptee Reports of Satisfaction with Birth Parent
Contact

Note. Adoptee sex was coded as 0 = male, 1 = female.

 $^{\dagger}.05$ *<math>p < .05.

 $p^{**}p < .01.$ ***p < .001.

Regression Analyses

To examine our study hypotheses in relation to one another, and include variables of adoptees' sex and age, four regression models were tested that considered family adoption communication and adoptive parent-child attachment relationships as predictors of emerging adult adoptees' satisfaction with birth family contact (see Table 2). Satisfaction with birth family contact, rather than frequency of birth family contact, was selected as the dependent variable for three main reasons: (1) not all emerging adult adoptees had current birth family contact; (2) frequency of contact was found to be unrelated to family adoption communication and attachment to adoptive parents in emerging adulthood in this sample; and (3) satisfaction with birth family contact has been demonstrated to be important to a variety of outcomes for adoptees and adoptive family dynamics in the literature more broadly. Furthermore, because less than half of the emerging adult adoptees reported any birth parent contact, we created a dichotomous variable representing the presence of current contact (yes or no), which was included as an independent variable in the regression models. Satisfaction with birth mother and birth father contact were considered separately as dependent variables. Attachment and communication with adoptive mothers and fathers were considered separately as predictors in each regression. Adoptees' age and sex were also included as predictors, as each has been found to be relevant to variables of birth family contact in previous studies (e.g., Farr et al., 2014).

Regression results showed that satisfaction with birth mother contact was predicted by the presence of birth mother contact, but not attachment to adoptive parents, nor family adoption communication (communication with adoptive mothers was marginally significant). Satisfaction with birth father contact was also predicted by the presence of birth father contact. In addition, satisfaction with birth father contact was predicted by family adoption communication, specifically with adoptive mothers (communication with adoptive fathers showed a significant trend), and by adoptees' sex (daughters were less satisfied overall than sons with birth father contact). Adoptees' age was not significant in any of the regression analyses (see Table 2).

DISCUSSION

Taken together, the results indicate that relationships with adoptive parents continue to play an important role in adoptees' experiences of birth family contact into adulthood, regardless of whether adoptees had current contact with birth parents. Overall, while adoptees were more satisfied with contact when there was current birth parent contact, adoptees were also more satisfied with contact when communication with their adoptive parents was sensitive and open—regardless of whether there was current contact. Open communication about adoption with adoptive parents appeared to be uniquely related to adoptees' experiences of contact with both birth mothers and birth fathers. Adoptees' attachments to adoptive parents were also relevant to emerging adult adoptees' satisfaction with birth parent contact. Thus, the role of adoptive parents in affecting adult adoptees' contact with birth parents was notable in several ways, particularly with family adoption communication.

Emerging adult adoptees, on average, reported that communication about adoption with both adoptive parents was sensitive and open. However, adoptees did note significantly more positive adoption communication with adoptive mothers than with adoptive fathers. In contrast, adoptees did not report any significant differences in perceptions of attachment to adoptive mothers versus adoptive fathers. These topics have not been explored in the scant existing research about emerging adult adoptees. As such, these results contribute new information to the adoption literature about adoptive parent-child relationships and to the broader developmental and family systems literature about parent-child relationships in emerging adulthood.

Neither family adoption communication nor attachment relationships differed by adoptees' age nor sex. Thus, adoptees were similarly likely to communicate about adoption with and report being securely attached to their adoptive parents during emerging adulthood, regardless of whether they were female or male, or younger or older emerging adults. Importantly, these results suggest no substantial differences in the quality of emerging adult parent-child relationships in adoptive families on the basis of whether parents and children are of the same or different sex and on the basis of whether adoptees are in their early or late 20s.

The results contribute to the literature for the first time about how feelings of attachment to adoptive parents are relevant to adoptees' reports of family communication about adoption during emerging adulthood. Perhaps not surprisingly, it was the emerging adult adoptees who felt more secure in their attachment relationships who also reported more positive experiences of communication about adoption with their adoptive parents. This finding suggests that adoptees who feel more securely attached to their adoptive parents are also likely to be in families where conversations about adoption are continuing to take place during adulthood, indicating an important role of the adoptive family throughout the lifespan for adoptees. 666 /

Associations among variables of family adoption communication and birth parent contact during emerging adulthood revealed that more open and positive communication with adoptive parents was more strongly associated with satisfaction with birth parent contact, rather than with the frequency of contact. Specifically, adoptees who perceived closer relationships to their adoptive parents during emerging adulthood reported greater satisfaction with birth father, but not birth mother, contact. This may indicate a uniquely important role of attachment to adoptive parents as related to adult adoptees' more positive feelings about contact with birth fathers, especially since far fewer adult adoptees had contact with birth fathers than with birth mothers in emerging adulthood. These results also are crucial in being among the first to explicitly examine and demonstrate that it is not adoptees with poor relationships with adoptive parents that are most satisfied with birth family contact, debunking myths about adoptees seeking out birth family contact as a result of negative adoptive family relationships.

The regression results lent further support to links between adoption communication with adoptive parents and satisfaction with birth parent contact that were regardless of whether birth parent contact was actually occurring. This finding suggests that adoptive parents communicate with their adult children about adoption even when there is no ongoing contact with birth parents. Thus, both adoptive parents play important and unique roles in influencing their adopted children's outcomes, and into adulthood. Some literature has also supported the unique importance of adoptees' communication with adoptive parents into adulthood, as related to aspects of birth family contact. In examining adoptive identity formation during adolescence and emerging adulthood among the adoptees in this sample, Von Korff and Grotevant (2011) found that frequency of adoptionrelated conversation between children and parents mediated associations between birth family contact and adoptive identity formation. While opportunities for birth family contact may facilitate more adoption-related discussions between adoptive parents and children over time, our results indicate that open discussion about adoption relates to adoptees' greater satisfaction with birth family contact, regardless of what frequency of contact they have with birth parents.

The regression results shed light on some of the family processes at work in adoptive families with adult children. Firstly, the regression results demonstrated that in emerging adulthood, frequency of birth parent contact is an important factor related to adoptees' satisfaction with birth parent contact. As emerging adult adoptees can make decisions about contact independently, perhaps those who choose to have contact experience greater satisfaction, which is consistent with earlier research with this sample (Farr et al., 2014; Grotevant et al., 2007). Of importance is that this finding could be bidirectional, as these are cross-sectional data: Adoptees who are more satisfied with contact may be more likely to seek out contact. The possibility of bidirectionality is also supported by the family process of emotional distance regulation between birth and adoptive families (Grotevant, 2009). As part of this process, individuals assess their interest in participating in contact with their counterpart (which may revolve around issues of trust, commitment, and belief in the perceived value of contact), and in turn, could influence actual contact with birth family members. Next, individuals' experience in that contact (satisfaction) could influence the likelihood of subsequent contact—with satisfaction leading to more and dissatisfaction leading to less. Satisfaction with contact with birth fathers in particular appeared to be related not only to contact frequency, but also to adoptive mother communication (adoptive father communication approached significance). As adoptive parents, and perhaps particularly adoptive mothers, may act as "gatekeepers" to children's contact with birth family when children are young (e.g., Neil, 2012), these parental behaviors may still be influential to adoptees' decisions about contact in adulthood.

Since children are initially dependent on their parents, adoptees are not easily able to have contact with their birth parents independently without first going through their adoptive parents. Adoptive mothers may thus act as mediators to this contact by contacting and arranging meetings or other methods of contact. Indeed, adoptive mothers and fathers have been shown to differ in how they communicate with their child about their adoption, and research has suggested that mothers may be more likely to be involved in adoption dialogue than fathers (Freeark, Rosenblum, Hus, & Root, 2008; Wrobel, Kohler, Grotevant, & McRoy, 1998). Furthermore, mothers who believed that there was a difference in the tasks of adoptive versus biological parenting were more likely to engage in adoption communication, but fathers did not follow this association (Freeark et al., 2008). This finding suggests that adoptive mothers, more so than adoptive fathers, would likely be involved with negotiating a child's contact with birth family—perhaps well into adoptees' adulthood. More research is necessary to understand the unique roles of adoptive mothers and fathers in influencing adoptees' experiences of contact over time.

Although adoptees' sex was not relevant to birth mother contact, it was relevant to birth father contact. Female adoptees were more dissatisfied than male adoptees with current birth father contact, which extends previous findings about women being more dissatisfied with birth family contact in emerging adulthood among this sample (Farr et al., 2014). Thus, as communication with adoptive parents remains important for adoptees into adulthood, it may be especially influential to birth father contact, and perhaps particularly for daughters. Perhaps daughters are less satisfied than sons due to differences in socialization and expectations. Often, birth mother contact is more strongly emphasized than birth father contact, and this might influence similar expectations among both male and female adoptees about birth mothers. However, with birth fathers, it might be more difficult for sons to express or even identify dissatisfaction in the same way that daughters might. Whereas girls are more often socialized to express their emotions, boys may experience less ease in doing so. In support of this possible gender difference among adoptees, a recent meta-analysis of gender differences in emotion expression from infancy to adolescence demonstrates that specific contexts have a great impact on emotional expression in boys and girls (Chaplin & Aldao, 2013).

Implications for Practice and Policy

Our results may be informative to clinicians, practitioners, and others who work with adoptive families, as well as to policies about openness in adoption. The results underline adoption as a lifelong process and experience, not a static one-time event that happens early on in the life of adoptees. Furthermore, adoption is not a completely isolated or individual experience, but it is one that is influenced by important family relationships and experienced as a series of family processes over time. As such, practitioners should especially emphasize the importance of cultivating supportive parent-child relationships in adoptive families, particularly promoting behaviors that will enhance the security of attachments of adoptees to their adoptive parents early in life and maintain these relationships as children grow into adults. Practitioners should consider the value of facilitating conversation about adoption in adoptive families, regardless of the status of contact arrangements with birth relatives. Parents should be encouraged to discuss issues of adoption with their children throughout the family life cycle, as our results suggest that ongoing family communication about adoption is not only important in childhood, but continues to be important as adoptees mature into emerging adulthood. Emerging adult adoptees, at age 18, often have the ability to make independent decisions about contact with and searching for birth family. Support from adoptive parents, keeping open lines of communication with adoptees and showing understanding about the complexities of navigating contact with birth relatives, can assist adoptees as they gain increasing autonomy during emerging adulthood.

Limitations and Directions for Future Research

One possible limitation of our results is a concern of multicollinearity among the parent-child attachment and family adoption communication variables, given their significant association (Table 2). To more closely investigate possible consequences of multicollinearity in our results, we examined the variance inflation factor (VIF) scores between mother attachment and mother adoption communication, as well as between father attachment and father adoption communication. These values were 1.90 and 2.58 respectively. The lowest possible VIF score is 1, and generally scores above 10 are considered to indicate multicollinearity (e.g., O'Brien, 2007; Shieh, 2011); our values were well below this threshold. We also ran the four regression analyses without attachment in the model. We discovered that the models fit better or the same without attachment, suggesting that multicollinearity was not causing significant model fit improvement when both attachment and adoption communication variables were included. The coefficients were greater or the same in the models without attachment (indicating that multicollinearity was not inflating coefficients), and adoption communication was similarly significant (or nonsignificant) in predicting satisfaction with contact as it was in the models where attachment was included. Although we considered a composite variable to manage the potential multicollinearity concern, we ultimately decided that it was theoretically important and justified to treat parent-child attachment and family adoption communication as two distinct constructs. While the parent-child attachment measure taps perceptions of attachment security, which includes aspects of parent-child communication broadly, the adoption communication scale assesses how adoptees perceive their communication with parents about adoption specifically. It is entirely possible that some parents and children have high quality communication in general, but do not specifically discuss adoption, and vice versa. Thus, we maintained adoption communication and attachment as two separate variables in our study.

While this study makes contributions about the understanding of adopted emerging adults and their navigation of birth family contact, the results must be understood from the context of the experiences of adoptees who had all become part of their families as a result of private, domestic, same-race infant adoptions. While variations among this sample allow for interesting comparisons for different levels of openness in adoption, there are other factors, such as race, culture, age of adoption, and other pre-adoptive circumstances, that should be examined among other populations of adoptive families (e.g., those representing transracial, international, and/or foster care placements), particularly as related to dynamics of adoptive parent–child attachment, family adoption communication, and birth family contact over time.

Furthermore, constructs of satisfaction with birth family contact were assessed using a global code derived from adoptees' interview transcripts. This is only one of many methods that could be used to examine adoptees' perceptions of contact with birth relatives in the future. Moreover, we acknowledge that distinctive psychological processes are likely at work among adoptees with and without ongoing birth family contact, which we discuss in some of our qualitative reports (e.g., Farr et al., 2014). Although we know from extensive qualitative data from participant interviews that specific views about contact differ widely across participants (Farr et al., 2014; Grotevant et al., 2007), we have consistently found that it is not the absolute level of contact, but rather the respondents' satisfaction with whatever contact arrangements they do have that appears to be more influential. In working with the longitudinal data from this sample, we understand that participants' world

view about adoption and what it means in their lives seems to be one of the biggest differences between those who have contact and those who do not. Adoptees who are satisfied with no contact tend to view adoption as a family form in which the child is subtracted from one family and added to another, while those who have contact often have a broader view of family and have transformed their view of family to be more inclusive—this is the notion of the adoptive kinship network (Grotevant, 2009). Nonetheless, we have found that satisfaction with contact provides a construct that can be used across the entire sample and has been revealing in ways that are helping us build theory. Thus, satisfaction with contact as a continuous variable is one that cuts across all respondents (with or without contact) and is accruing construct validity across our various studies (e.g., Farr et al., 2014; Grotevant et al., 2007; Grotevant et al., 2011).

This report focuses on the perceptions of one member of the adoption triad (i.e., the adoptee), but future research would benefit from involving the perspectives of other adoptive and birth family members. As emerging adults, the role of the adoptees' other close relationships may also play a significant role in influencing their decisions about birth family contact. Romantic partners, children, siblings (adopted or non-adopted), and/ or close friends may be influential in guiding adoptees' feelings about their adoption, birth family contact, and/or satisfaction with contact. For instance, as emerging adults begin to parent their own children, adoptees' feelings towards their openness arrangement may shift, leading perhaps to a new interest or shifted perspective on their arrangements regarding birth family contact (e.g., Farr et al., 2014).

CONCLUSION

Our findings contribute greater insight about family processes related to openness in adoption that occur during emerging adulthood. Consistent with earlier research (Wrobel, Grotevant, & McRoy, 2004), adoptees with negative family relationships were not more likely to have contact with birth relatives—thereby refuting notions that adoptees only desire birth family contact when they face difficulty in their adoptive families. Rather, it appears to be the opposite—having positive relationships with adoptive parents, characterized by sensitive and open communication about adoption, were linked with positive feelings about birth parent contact. These results build on earlier research by adding to the literature about openness in adoption, about adoptive families as adoptees enter adulthood, and about the pivotal role of family communication about adoption—which is not only important for adoptees when they are children, but well into their adulthood.

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