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A Communication-Based Approach to Adoptive Identity: Theoretical and Empirical Support

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Abstract

The current study uses structural equation modeling to examine adoptive parent communication as it relates to adoptee adjustment directly and indirectly through adoptive identity. Using retrospective accounts of 179 adult adoptees, findings indicate that both adoption- (adoption communication openness) and non-adoption-related (parental confirmation and affectionate communication) parental communication are related to adoptive identity work and positive affect about adoption and birth parents. Preoccupation mediates the relationship between parental communication and adoptee adjustment. The current study integrates research and theorizing from identity, adoption, and communication literatures to develop a communication-centered conceptual model of adoptive identity development to inform future adoption research and practice.

Keywords: adoptive identity, parental communication, affectionate communication, parental confirmation, adoption communication

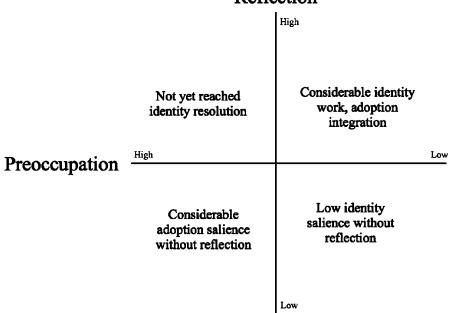
Families formed through adoption rely in large part upon communication to create and maintain their relational bond. Adoptive parents face the task of discursively negotiating numerous facets of family life, such as explaining the legal process of adoption, constructing a parent-child bond with their child despite genetic relations, and simultaneously including and excluding members of the birth family (Grotevant, Fravel, Gorall, & Piper, 1999). Due to the central role of communication in these relationships, adoptive families are constructed through "law and language" (Galvin, 2003, p. 239) and are dependent upon their discourse to develop and maintain their personal and family identities. It is therefore essential that practitioners, adoption researchers, and adoptive family members have an accurately informed understanding of adoptive family communication. Thus, our purpose in the current study is to enhance scholarly understanding of the role of adoptive parent communication by investigating the relationship between adoptive parent communication, adoptive identity, and adoptee adjustment. In the following sections, we provide an overview of adoptive identity, a rationale for the role of adoptive parent communication in facilitating adoptive identity work, and a hypothesized model that positions adoptive identity as a mediator between parental communication and adoptee adjustment.

Adoptive Identity in the Family System

Most individuals tend to participate in identity work during adolescence, but adoptees have added tasks as they seek to integrate their adopted status into their definition of self (Grotevant & Von Korff, 2011). Adoptees face a number of dissimilarities from their adoptive families, including differing characteristics, appearances, abilities, and ethnic backgrounds (Dunbar & Grotevant, 2004); they also have family structures that tend to differ from those of their peers. Such differences have the potential to complicate the identity development process, resulting in identity confusion (Colaner & Kranstuber, 2010). Thus, it has been theorized that adopted individuals form a unique aspect of identity, *adoptive identity*, or an understanding of what it means to be an adopted person (Grotevant, Dunbar, Kohler, & Esau, 2000).

We situate adoptive identity in the Eriksonian (Erikson, 1968) school of identity theorizing – specifically drawing from the principles of exploration and commitment as central to the identity development process - as well as Grotevant (1997) and Grotevant et al. (2000)) adoptive identity theorizing. Previous work has identified two primary components of adoptive identity: reflective exploration and preoccupation (Colaner, 2014). Reflective exploration, defined as the degree to which one has thought about the details of his or her adoption, is an important component of integrating one's adoption into a larger sense of self. In addition, preoccupation is an indicator of the role of adoption in defining the self. Individuals with high levels of preoccupation view their adoption as their primary identity and tend to devote considerable "psychic and emotional energy" to the role of adoption in their life (Dunbar & Grotevant, 2004, p. 140). These individuals position adoption as the "organizing theme" for their definition of self (Grotevant et al., 2000, p. 382). Preoccupation, as a "marker of identity exploration" (Kohler, Grotevant, & McRoy, 2002, p. 101), gives important insight into individual and relational characteristics such as feelings of alienation and reported family functioning.

Adoptive identity theorizing (Grotevant & Von Korff, 2011) and research (Colaner, 2014; Dunbar & Grotevant, 2004) suggest that high levels of reflection and



Reflection

Figure 1. Adoptive identity work across reflection and preoccupation levels.

low levels of preoccupation represent extensive identity work. Considering reflective exploration and preoccupation in tandem with one another is helpful for understanding the larger experience of adoptive identity; Figure 1 depicts the combination of these constructs. Individuals who have reflected on their adoption but have high levels of preoccupation have not reached identity resolution, whereas individuals with high preoccupation and low reflection may not have critically examined their adoption. Conversely, individuals with low preoccupation and low reflective exploration may have committed to low adoptive identity salience without critically examining the role of adoption in their definition of self. Individuals who have thought about their adoption at length and exhibit low levels of preoccupation are those who have done the most considerable adoptive identity work. As such, it is important to look to reflective exploration and preoccupation together as indicators of adoptive identity work.

Individuals who have undergone considerable identity work tend to have healthier relationships, improved personal well-being, and a more positive outlook on their adoption (Brodzinsky, 2006; Mendenhall, Berge, Wrobel, Grotevant, & McRoy, 2004). Developmental perspectives on identity suggest that the bulk of identity work takes place during adolescence (Erikson, 1968) but continues on in a cycle (Marcia, 1993). As new opportunities arise for committing to values and/or goals throughout the life span as a result of individual or contextual changes, individuals undergo new efforts of exploration to embrace the possibility for reformation of their personal identity. For example, a medical diagnosis may prompt an adopted individual to want to know more about his or her genetic history, or a death of an adoptive parent may prompt an individual to seek out his or her birth parents (Grotevant & Von Korff, 2011). Consequently, identity is never permanently fixed, although older adults will be more stabilized in their identity formation than young adults. As such, age is an important consideration for adoptive identity.

Although quite a bit is known on the developmental factors of identity work, the relational factors contributing to adoptive identity are largely unclear. Adoption research and communication research offer some insight into factors contributing to into adoptee adjustment, and the role that adoptive parents play in facilitative their child's development is prominent in this research. Adoption scholars agree that parents play a primary role in constructing their adopted child's understanding of his or her adoption. A number of researchers have focused on the role of information-sharing, emphasizing both frequency and content of informative communication about the child's adoption (e.g., Brodzinsky, 2006; Mendenhall et al., 2004; Sobol, Delaney, & Earn, 1994). Captured most clearly in the Family Adoption Communication Model (Wrobel, Kohler, Grotevant, & McRoy, 2003), this line of research demonstrates that parents can enable their children to become more comfortable with their adoption status by giving them information about the adoption and encouraging the child to ask questions (Mendenhall et al., 2004; Schoenberg, 1974). Thus, telling the child early and often about the adoption is essential to the child's adjustment (e.g., Grotevant & McRoy, 1998; McRoy, Grotevant, Lopez, & Furuta, 1990).

More important than frequency of adoption communication, however, is the nature in which the communication occurs. Brodzinsky (2005) introduced the concept of adoption communication openness (ACO) to reference the content, quality, and overall ease of adoption-related communication. ACO is adoption-specific communication that is open, direct, empathic, and sensitive in nature. Such communication should encourage the adopted child to feel as though his or her adoption-related thoughts and feelings are accepted and understood within the adoptive family. Research focusing on the process and context of adoption communication demonstrates that the way in which families communicate about the adoption may be more consequential for the child's development than situations surrounding the adoption (Brodzinsky, 2006). Although ACO can be challenging (Jones & Hackett, 2008), ACO is consistently linked to positive outcomes such as fewer child behavioral issues (Grotevant, Rueter, Von Korff, & Gonzalez, 2011) and increased relationship quality (Passmore, Feeney, & Foulstone, 2007). Individuals who experience high levels of ACO also tend to be more likely to seek out information regarding their adoption in emerging adulthood (Skinner-Drawz, Wrobel, Grotevant, & Von Korff, 2011). ACO is likely a pathway to identity development as parents facilitate the grieving of adoption-related loss in their child's identity development (Donahue, 2008).

Parental communication about adoption is specifically important for adoptive identity. Adoptive mothers in particular are important identity agents for their children. Adoptive mothers express concern and responsibility for their child's adoptive identity development and help their child take active steps toward exploring and committing to the role of adoption as it relates to a larger definition of self (Von Korff, Grotevant, Koh, & Samek, 2010). Increased parental communication about adoption tends to promote adoptive identity formation (Von Korff & Grotevant, 2011); communication about adoption that is warm, supportive, and inviting (aka, communication openness) is likely an important feature of this parental influence on adoptive identity. Continuing this line of research, the following hypotheses are posed:

Hypothesis 1: Controlling for participant age, adoptive parents' ACO is (a) positively related to reflective exploration and (b) negatively related to preoccupation.

Hypothesis 2: Adoptive parents' ACO is positively related to (a) positive affect about adoption and (b) positive affect about birth parents.

Contextualizing Adoption Communication

To date, research on communication in adoptive families has focused exclusively on adoption-related communication (e.g., Brodzinsky, 2006; Sobol et al., 1994; Wrobel et al., 2003). Adoption, however, is just one aspect of the parent-child relationship. Adoptees report that adoption-related conversations tend to occur with varying frequency throughout their development, but adoption is not the most important or most regular topic of conversation (Colaner & Kranstuber, 2010). Adoption communication occurs somewhat infrequently within a larger framework of parent-child communication. Attending solely to adoption-related communication neglects the important communication environment in which adoption conversations occur. In order to understand how adoptive parents communicatively create an environment in which the child is able to integrate his or her adoption into a larger sense of self, we must attend to the aspects of parent-child communication that foster development of the child as a person. Examining other constructs known to be important to developing children's selfconcept provides greater insight into the process by which adoptive parents encourage adoptive identity work. Parental confirmation and affection communication are two constructs with a lengthy track record of promoting child well-being.

Parental confirmation involves positive and supportive communication that allows others to feel "endorsed, recognized, and acknowledged as valuable, significant individuals" (Ellis, 2002, p. 321), thus encouraging individuals to feel connected to others and valued as a human being. Ellis builds upon the writings of Martin Buber (1958) who positioned confirming communication as among the most important features of human interaction. Ellis applies Buber's perspective specifically to parent-child communication, determining that parental confirmation is a significant predictor of children's feelings of global self-worth. Schrodt, Ledbetter, and Ohrt (2007) further validated this relationship in demonstrating that parental confirmation significantly relates to child's health and well-being. These findings suggest that parental confirmation behaviors cannot be underestimated for the healthy and normative development of children.

Individuals who have undergone considerable identity work are able to incorporate both positive and negative aspects of their adoption into a sense of self that includes but is not overly preoccupied with their adopted status (Dunbar & Grotevant, 2004). Parental confirmation will likely encourage an adopted child to focus on aspects of the self that do not depend on his or her status as an adopted individual. Ellis (2002) discovered that parents can encourage social development in their children by acknowledging the child's thoughts and opinions, supporting the child in his or her activities, and validating the child's input through active listening. Parental behaviors such as these likely encourage the child to develop a sense of self that is not overly dependent on his or her status as an adopted individual by emphasizing the global worth of the child. Embracing one's worth as an individual likely also encourages acceptance and belonging in the adoptive family, thus facilitating positive affect for one's adoption and birth parents.

Another important communication behavior parents enact to encourage child development is affectionate communication. Floyd and Morman (1998, 2000, 2005) have established a productive line of research highlighting the central role that affection plays in parent-child relationships. Affectionate communication, referring to a parent's "intentional and overt enactment or expression of feelings of closeness, care, and fondness for their children" (Floyd & Morman, 1998, p. 145), is among the most important behaviors in close relationships to establish feelings of belonging and security (Floyd & Morman, 2005). Children view their parents' expressions of affection as reflections of relationship closeness (Floyd & Morman, 2000). Affection from parents is an important predictor of children's social development in areas such as self-esteem (Schrodt et al., 2007), relationship satisfaction (Floyd & Morman, 2000), and life satisfaction (Young, Miller, Norton, & Hill, 1995). Given the important role that affection provides in facilitating a child's development of a sense of self, affectionate communication is likely an important component of adoptive identity work and adoptee adjustment.

In order to attend to communication in adoptive families extending beyond adoption disclosures, it is important to address aspects of general parental communication known to be important to the development of children's self-concept. Based on research supporting the role of parental confirmation and affectionate communication in bolstering child development, the following predictions are posed:

Hypothesis 3: Controlling for participant age, non-adoption-related communication (parental confirmation and affection communication) is (a) positively related to reflective exploration and (b) negatively related to preoccupation. **Hypothesis 4:** Non-adoption-related communication (parental confirmation and affection communication) is positively related to (a) positive affect about adoption and (b) positive affect about birth parents.

Attending to adoption- and non-adoption-related communication within the same model allows for the inspection of the relative contribution of each type of communication to adoptee adjustment. Non-adoption-related communication that supports the positive development of the child occurs more often and provides the environment in which adoption disclosures occur. As such, non-adoption-related communication is not only important to include alongside adoption communication

but may also be a stronger predictor of adoptee development due to its increased frequency and strong relation to individual well-being. To test the relative contribution of adoption-and nonadoption- related communication, the following hypothesis is posed:

Hypothesis 5: Non-adoption-related communication will be a stronger predictor of (a) reflective exploration, (b) preoccupation, (c) positive affect about adoption, and (d) positive affect about birth parents than adoption communication.

Mediating Role of Adoptive Identity and Proposed Model

Considerable research supports adoptive identity as a predictor of adoptee adjustment (e.g., Donahue, 2008; Dunbar & Grotevant, 2004). In addition, adoptive parent communication is related to both adoptive identity work and adoptee adjustment as outlined in the hypotheses in the current study. Importantly, adoptive identity is the mechanism through which individuals make sense of their adoption (Grotevant & Von Korff, 2011). Our communication-centered approach to adoptive identity places adoptive identity as a bridge between parental communication and adoptees' feelings about adoption and birth parents. Adoptive identity research privileges the internal processes of exploration and commitment that result in positive and/or negative feelings about one's adoption (Grotevant et al., 2000). The relationship between parental communication and adoptive identity established by previous researchers (Von Korff & Grotevant, 2011; Von Korff et al., 2010) supports the position of adoptive identity at the center of our model. Although we expect direct relationships between adoptive parent communication and adoptee adjustment, the indirect relationship of these variables through adoptive identity is central to our foundation in adoptive identity research. Testing the mediated relationship between communication and adjustment via adoptive identity provides key insight into the internal identity mechanisms that are prompted and/or supported by adoptive parent communication and encourage the formation of positive feelings about one's adoption and birth parents.

Hypothesis 6: Controlling for participant age, reflective exploration and preoccupation will mediate the relationship between adoptive parent communication (ACO and non-adoption-related communication) and adoptee adjustment (positive affect about adoption and birth parents).

We present a hypothesized model (Figure 2) that aims to move beyond the assessment of relationships between individual parental communication constructs and adoptive identity to an inclusive model attending to the role of adoptive parents in facilitating adoptive identity work. The proposed hypotheses integrate research and peripheral theorizing from identity, adoption, and communication literatures to develop a larger view of the way in which adoptive parents facilitate adoptive identity work. The proposed model aims to expand upon existing conceptualizations of communication in adoptive families by attending to both adoption- and

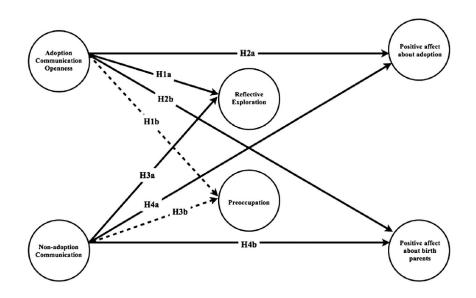


Figure 2. Hypothesized paths in structural model. Mediated paths (Hypothesis 5) are not depicted.

non-adoption-related communication. The main purpose in the proposed model is to highlight the role of parental communication in facilitating adoptive identity work and adoptee adjustment.

Method

Participants and Procedures

This study utilized online data from a convenience sample of adult adoptees collected during a larger study of adoptive family communication. After obtaining approval from the Institutional Review Board of the authors' university, participants were recruited three ways. First, participants were solicited through network sampling in which participants from previous studies were contacted to again participate in the current project. Second, individuals were recruited from online forums and social media groups for adult adoptees. Before posting the call for research in the forums/ groups, the first researcher contacted the moderator for approval. Once permission to post was granted, the link to the online survey was posted; individuals interested in participating in the study were able to click on the link and complete the survey. Finally, participants were recruited from undergraduate courses at a large Midwestern university; adoptees enrolled in the classes who opted to complete the survey received a small amount of extra credit for their participation.

To qualify for the survey, participants had to be over 18 years of age and had to have been adopted by an individual other than a stepparent. Participants originally included 253 participants. Thirty-six (14.23%) individuals were dropped from the sample due to missing data. In addition, participants were removed from the sample in the current study if they were adopted via international adoption (n = 15) or foster care (n = 16), given the unique identity challenges that are embedded in these scenarios (Galvin, 2003; Suter, Baxter, Seurer, & Thomas, 2014). Participants were also removed from the sample if they were placed with their adoptive parents after the age of 2 (n = 7), given research indicating challenges with attachment for adoptees placed after 2 years of age (Barni, Leon, Rosnati, & Palacios, 2008; Rijk, Hoksbergen, & ter Laak, 2008). Additional information about the data used in the article can be obtained by contacting the first author.

After removing these individuals, participants in the sample for the current study included 179 adults (28 men, 137 women, 14 unknown/other) adopted via infant/ toddler domestic adoption. Ages ranged from 19 to 75 (M = 41.89, SD = 12.25). The majority of the sample identified as Caucasian (n = 140, 78.2%); 16 (8.9%) individuals identified as mixed race, 1 (0.01%) as African American, 1 (0.01%) as Asian, and 1 (0.01%) as Hispanic; the remaining participants (n = 20, 11.2%) did not indicate their race.

With regard to sample size, a variety of standards exist to guide decisions about the minimum acceptable number of participants to assess a model. Perhaps the most common standard is the ratio of observations to parameters. While Kline (2005) suggests 10:1, others have suggested that 5 observations per parameter are acceptable (Bentler & Chou, 1987). In a meta-analysis of studies using structural equation modeling (SEM), Kotz, Krishnan, and Wickersham (2007) found that the average ratio of participants to parameter across 92 studies was 5.91:1. Statisticians have also suggested that samples over 100 are sufficient (Muthen & Muthen, 2010). Little (2013) demonstrates that the rate of error reduction in the discrepancy between the population and sample mean slows considerably as sample sizes increase in size from 100 to 150 participants, and slows dramatically as samples increase over 150 participants. He concludes that sample sizes around 100 provide sufficient confidence for most questions in the social sciences. Applying any of these standards supports the sufficiency of the sample size in the current study.

Measurement Model Analysis

Analyses were conducted using SEM with maximum likelihood (ML) estimation using the lavaan package (Rosseel, 2012), an open-source package for latent variable modeling housed in the R environment (R Core Team, 2014). SEM was selected for the present study due to the ability of the method to (a) correct for measurement error and (b) estimate between multiple dependent and independent variables. We evaluated the fit of the model to the data by examining the chi-square statistic for both the measurement and structural model. In examining the chi-square, we used a cutoff criterion of $\chi^2/df < 3$ to assess whether the χ^2 was affected by sample size (Kline, 2005). Because χ^2 can be affected by large sample sizes, we also examined the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR) to determine model fit. According to Little (2013), models with acceptable fit have RMSEA below .08, CFI above .90, and SRMR less than .08.

Before latent variable analysis, a small amount of missing data (less than 1%) was imputed using an expectation-maximization (EM) algorithm in SPSS. The data were missing completely at random according to Little's Missing Completely at Random (MCAR) test, and thus, the imputed data did not violate the assumptions of missing data imputation (Enders, 2010). The initial step in our analysis was to conduct a confirmatory factor analysis (CFA) with each item serving as an indicator of the latent variable. This step allowed us to assess the quality of the survey items in measuring main constructs in the study. Our CFA demonstrated that the model demonstrated poor fit, $\chi^2(N = 179, 2606) = 5,883.04$, p < .00, $\chi^2/df = 2.26$, CFI = .77, RMSEA = .09, CI = [0.08, 0.09], SRMR = .08. Modification indices suggested allowing measurement errors of several items to covary within the same factor. In addition, examination of R² statistics indicated several items with low variance explained by the latent variable (less than .35). These variables also had high residual variances (above .65). Low variance and high residuals suggest that the items are problematic and do not adequately measure the construct. These items were examined for theoretical relevance to the construct by assessing item wording. Items that emerged as problematic in the CFA were removed if there was theoretical justification to do so. Removed/problematic items are discussed below in the "Measures" section. After removing total of 15 problematic items and freeing 15 paths to allow measurement errors within the same factor to covary, model fit was acceptable, $\chi^2(N = 179, 1559) = 2,736.67, p < .00, \chi^2/df = 1.75, CFI = .90, RMSEA = .07,$ CI = [0.06, 0.07], SRMR = .06.

Measures

Individuals reported on their perceptions of their adoptive family interactions during their upbringing as well as current levels of adoptive identity and adjustment. All items are measured on a 7-point Likert-type scale ranging from *strongly disagree* (1) to *strongly agree* (7) except where noted; thus, high scores indicate high levels of each construct. Reliability estimates for each measure are available in Table 1.

Adoptive parent communication. Participants completed measures for mother and father communication variables. This study focuses on overall parental behaviors, and as such, scores from parents are averaged when conducting data analysis (correlations between the mother and father variables ranged from r = .52 to .67, p < .05). In cases in which an adoptee has only one parent on which to report, the score of that single parent is used in analysis. Using this approach not only allows the ability to examine a global parental effect but also allows for inclusion of two-parent and single-parent families in the overall analysis. One hundred forty-six participants reported on both their mother's and father's communication, 25 reported on just their mother, and eight reported on just their father.

	1	2	3	4	5	6	7	М	SD	α
1. Adoption communication openness	_							3.44	1.95	.97
2. Parental confirmation	.66**	_						4.55	1.78	.98
3. Affectionate communication	.63**	.84**	—					3.01	1.06	.97
4. Reflective exploration	.15*	.08	.15*	_				4.69	1.54	.89
5. Preoccupation	22**	17*	18*	.05	_			3.26	1.73	.93
6. Positive affect about adoption	.57**	.52**	.51**	.20**	41**	—		4.69	1.72	.93
7. Positive affect about birth parents	.25**	.24**	.26**	.06	37**	.67**	—	4.73	1.94	.77
8. Age	23**	19*	13	.06	.06	15	18*	41.48	12.25	—

Table 1. Adoptee Reports of Communication, Adoptive Identity, Adjustment Variables: Correlations and Descriptive Statistics (N = 179).

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

ACO was measured using the Adoption Communication Openness Scale (ACOS; Brodzinsky, 2006). The ACOS assesses the degree to which the adoptee perceived his or her parents to be honest, open, and approachable about discussing adoption issues. The original scale has 14 items (e.g., "It is easy for me to express my thoughts and feelings about being adopted to my parent"). Four items, however, emerged as problematic in the CFA. Examination of question wording revealed that three questions about the birth parents had low loadings ("This parent was uncomfortable when I asked questions about my birth parents," "I felt very uncomfortable discussing my birth parents with this parent," "I had many thoughts and feelings about being adopted or about my birth parents that I could not share with this parent"). Given the secrecy that permeated adoptions in the era in which these individuals were adopted (Galvin & Colaner, 2013), participants would likely have been adopted with little information about their birth parents. Adoptive parents were likely unable to talk about birth parents because they knew virtually nothing about the birth parents due to closed records. Therefore, it is consistent with theorizing on ACO that discussion about birth parents would be considerably different from conversations about the adoption in general or the meaning of adoption in the adoptee's life. As such, these questions were removed. A fourth question pertained to perspective taking in the parent-child relationship ("This parent had difficulty in understanding adoption from my point of view"). Given that this question is more about the child's perception of the parent's perspective taking than actual communication about adoption, it follows that this question would not be consistent with other items and was therefore removed. After these theoretically based modifications, 10 items measured ACO with standardized factor loadings ranging from .65 to .96.

Parental confirmation was assessed using the Parent Confirmation Behavior Indicator (PCBI; Ellis, 2002). The PCBI measures the degree to which participants feel as though their parents made them feel valued as human beings. The PCBI has 12 items (e.g., "Made statements that communicated to me that I was a unique, valuable human being") with standardized factor loadings ranging from .69 to .93.

Affectionate communication was assessed using the Affectionate Communication Index (ACI; Floyd & Morman, 1998). The ACI has 19 items measuring verbal expressions of affection (e.g., "Say how important relationship is"), direct non-verbal expression (e.g., "Hug each other"), and affectionate social support (e.g., "Help each other with problems"). Seven items emerged in the CFA as problematic ("Kiss on lips," "Give massages to each other," "Wink at each other," "Say 'You're my best friend,'" "Say 'I like you,'" "Say 'You're a good friend,'" "Acknowledge each other's birthday"). With the exception of acknowledging birthdays, these behaviors are relatively uncharacteristic of a parent-child relationship. Acknowledging birthdays had virtually no variability (M = 4.62, SD = 0.81), indicating that this behavior may be more of an expectation of parent-child relationships than an expression of affection. Based on these theoretical justifications, these items were dropped from the analysis, leaving 12 items measuring affectionate communication; standardized factor loadings for these items ranged from .79 to .91.

Adoptive identity. The Adoptive Identity Work Scale (AIWS; Colaner, 2014) was used to assess levels of reflective exploration and preoccupation. The AIWS is a reliable scale with a clear factor structure and evidence of construct, predictive, and concurrent validity. The *reflective exploration* subscale of the AIWS was used to assess the degree to which adoptees had thought about the details of their adoption. Five items reflect the reflective exploration dimension (e.g., "Reflecting on the events leading up to my adoption has been helpful to me"), with standardized factor loadings ranging from .59 to .83. The *preoccupation* subscale assesses the degree to which one's adopted status is overly emphasized in one's overall sense of self. This subscale includes five items (e.g., "My adoption is the most important thing about me"), with standardized factor loadings ranging from .70 to .92.

Adoptee adjustment. Two latent constructs were used to represent adoptee adjustment: positive affect about adoption and positive affect about birth parents. In terms of *positive affect about adoption*, a 10-item scale assessed the degree to which adoptees attach positive feelings to their adoption (e.g., "I think that my adoption was a positive thing for me") and have resolved negative feelings about the adoption (e.g., "I blame my adoption for problems I had in my life," reverse-coded). Scale items were based on the rating materials used in the Minnesota/Texas Adoption Project (Grotevant, 1997) as well as the Adoption Dynamics Questionnaire (Benson, Sharma, & Roehlkepartain, 1994). One item emerged as problematic in the CFA ("I would be open to adopting children myself in the future"). Given that adoptees often experience a strong desire to have a biological connection to a family member (Moyer & Juang, 2011), this question is likely not an accurate representation about individuals' feelings about adoption. This item was dropped, leaving

9 items measuring positive affect about adoption with standardized factor loadings ranging from .67 to .92.

Positive affect about birth parents was the second latent construct for adoptee adjustment. Six items measured the degree to which participants ascribe prosocial motives to the birth parents (e.g., "I think my birth parents must have loved me to have made the decision to place me in an adoptive family") and have formed positive feelings toward the birth parents (e.g., "I have fond feelings for my birth parents"). Items were derived from rating materials used in the Minnesota/Texas Adoption Project (Grotevant, 1997) as well as the items in the Adoption Dynamics Questionnaire (Benson et al., 1994). Examination of the CFA revealed that the items measuring attachment to birth parents were problematic ("I feel rejected by my birth parent(s)," "I have fond feelings for my birth parents," "I blame my birth parents for the difficulties I have faced in my life," "I feel a sense of connection to my birth parents"). These items were dropped, leaving two items (standardized factor loadings were .92 and .84) assessing participants' evaluation of their birth parents' decision to place them in an adoptive family.

Structural Model Analysis

All hypothesized relationships were assessed using SEM. As depicted in Figure 2, the hypothesized model had six latent constructs: non-adoption-related communication, adoption communication openness, reflective exploration, preoccupation, positive affect about adoption, and positive affect about birth parents. Participant age was included as a covariate of reflective exploration and preoccupation to control for the effect of age on adoptive identity. Non-adoption-related communication was identified with parental confirmation and affectionate communication as indicators; because the latent was under-identified, the two indicators were constrained to be equal to increase confidence in model estimation. Positive affect about birth parents was identified with the two items serving as indicators; these items were also constrained to be equal for model estimation purposes. The remaining latent variables (adoption communication openess, reflective exploration, preoccupation, and positive affect about adoption) were identified by creating three parcels or indicators consisting of the average of two or more items (Little, Cunningham, Shahar, & Widaman, 2002). Items measuring these constructs were divided into thirds, with items with covarying errors paired within the same parcel.

The measurement model for this hypothesized model had acceptable fit, $\chi^2(N = 179, 90) = 177.89$, p < .00, $\chi^2/df = 1.98$, CFI = .96, RMSEA = .07, CI = [0.06, 0.09], SRMR = .05. The measurement model showed a strong covariance between adoption communication openness and non-adoption-related communication ($\psi = .73$). Strong covariance between latent indicators points toward collinearity, which can "affect model convergence or severely bias parameter estimates and standard errors" (Geldhof, Pornprasertmanit, Schoemann, & Little, 2013, p. 34). To alleviate collinearity, adoption communication openness was residual centered with respect to affectionate communication and parental confirmation, per Geldhof et al.'s

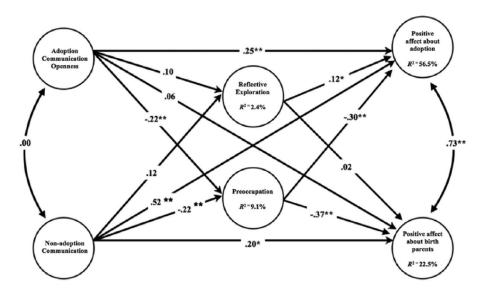


Figure 3. Structural equation modeling results with standardized coefficients. *p < .05. **p < .01. ***p < .001.

recommendation. The residual-centered version of adoption communication openness was included in the structural model, with the non-residual-centered version of affectionate communication and parental communication included as indicators of non-adoption-related communication. This change significantly improved model fit, $\chi^2(N = 179, 103) = 199.89$, p < .00, $\chi^2/df = 1.94$, CFI = .95, RMSEA = .07, CI = [0.06, 0.09], SRMR = .06, $\Delta\chi^2(1) = 3.41$, p < .001. This model was used as the base-line structural model.

Significance of regressed pathways was evaluated using the χ^2 difference test, wherein each regression path is constrained to 0, and each nested, constrained model is compared with the baseline structural model (Kline, 2005). A significant worsening of the constrained model indicates a significant regression path. Bootstrapping analyses were conducted using lavaan (Rosseel, 2012) to assess all indirect effects. Bootstrapping analysis relied on 5,000 samples randomly drawn from the data set to generate standard error estimates and 95% confidence intervals; confidence intervals were bias corrected. Confidence intervals that do not contain zero point to a significant indirect effect.

Results

Table 1 presents the correlations at the manifest level of measurement. Significant regression paths displayed in Figure 3 provide some support for the hypotheses. Results below display standardized coefficients.

The first set of hypotheses examined the relationship between adoption-specific communication and adoptee development. Individuals who reported high ACO were

more likely to have low preoccupation (Hypothesis 1b; $\beta = -.22$, $\Delta \chi^2(1) = 7.76$, p < .001) and high positive affect about adoption (Hypothesis 2a; $\beta = .25$, $\Delta \chi^2(1) = 16.93$, p < .001); however, ACO was not related to reflective exploration (Hypothesis 1a; $\beta = .10$, $\Delta \chi^2(1) = 2.07$, p = .15) or positive affect about birth parents (Hypothesis 2b; $\beta = .06$, $\Delta \chi^2(1) = .63$, p = .43). As such, Hypotheses 1 and 2 were partially supported.

The next set of hypotheses examined the degree to which non-adoption-related communication relates to adoptee adjustment. Individuals who reported higher nonadoption-related communication were lower in preoccupation (Hypothesis 3b; $\beta = -.22$, $\Delta \chi^2(1) = 7.89$, p < .001), had higher positive affect about their adoption (Hypothesis 4a; $\beta = .52$, $\Delta \chi^2(1) = 60.59$, p < .001), and had higher positive affect about their birth parents (Hypothesis 4b; $\beta = .20$, $\Delta \chi^2(1) = 6.56$, p < .05). Non-adoption-related communication, however, was not related to reflective exploration (Hypothesis 3a; $\beta = .12$, $\Delta \chi^2(1) = 1.39$, p = .24). As such, Hypothesis 3 is partially supported, and Hypothesis 4 is fully supported.

Hypothesis 5 predicted that non-adoption-related communication would be a stronger predictor of adoptee adjustment than ACO. The betas for non-adoption-related communication were stronger than ACO for each indicator of adoptee adjustment (see paths in Figure 3). To test whether the differences in regression paths were significant, the regression paths of adoption and non-adoption-related communication were constrained to be equal for each of the dependent variables. Change in model fit was assessed to determine whether constraining to be equal significantly worsened fit. Model fit was not significantly worse for reflection, $\Delta\chi^2(1) = 0.17$, p = .68; preoccupation, $\Delta\chi^2(1) = 0.62$, p = .43; or positive affect about birth parents, $\Delta\chi^2(1) = 0.02$, p = .87. However, constraining the paths to be equal when predicting positive affect about adoption significantly worsened model fit, $\Delta\chi^2(1) = 9.39$, p < .001, suggesting that non-adoption-related communication. As such, Hypothesis 5 was partially supported.

The final hypotheses (Hypothesis 6) explored the degree to which adoptive identity work mediated the relationships between adoptive parent communication and adoptee adjustment. The findings indicate that adoptive parent communication was indirectly related to positive affect about adoption and birth parents through preoccupation: adoption communication to positive affect about adoption, B = .13(95% CI = [.02, .21]); adoption communication to positive affect about birth parents, B = .12 (95% CI = [.01, .19]); non-adoption-related communication to positive affect about adoption, B = .11 (95% CI = [.01, .21]); and non-adoption-related communication to positive affect about birth parents, B = .10 (95% CI = [.01, .19]). These findings provide partial support for Hypothesis 6, suggesting that both adoption- and non-adoption- related communication are related to positive affect about adoption and birth parents indirectly through preoccupation.

Discussion

Findings from the present study provide insight into the potential role of adoptive parent communication in facilitating adoptee development and point to two conclusions. First, parental communication is related to adoptee adjustment, particularly non-adoption- related communication. Second, adoptive identity work is related to adoptee adjustment, yet predictors of adoptive identity work remain unclear. The findings and implications from the present study form the basis for a communication-centered conceptual model of adoptive identity development. These implications, the conceptual model, and the study's limitations are discussed below.

Parental Communication as Facilitating Adoptee Adjustment

First, findings from the present study suggest that parental communication is an important aspect of adoptees' adjustment for individuals adopted via domestic adoption. Both general and adoption-related communication emerged as significant predictors of adoptee development, suggesting that parental communication may support adoptee adjustment.

In terms of adoption communication, findings from the present study suggest that individuals who perceive their parents to be communicatively open about their adoption tend to have positive feelings about their adoption and low levels of preoccupation. Research on ACO, referring to the content, quality, and overall ease of adoption-related communication, gives context to this finding. Brodzinsky (2005) explains that adoptive parents who are high in ACO exhibit direct, empathic, and sensitive communication, which supports the child's emotions about the adoption. As adoptive parents create a secure context in which to discuss the child's place in his or her family, adoptees may be less likely to feel as though his or her adoption is stigmatized.

The present study also points toward the importance of non-adoption-related communication for adoptee adjustment, as individuals with adoptive parents who are affectionate and confirming tend to have high levels of positive affect about adoption and birth parents and low levels of preoccupation with adoption. Existing research has documented the degree to which confirming and affectionate communication are important for child well-being: As parents foster a sense of worth and importance in their children, children tend to exhibit high levels of mental health and well-being (Schrodt et al., 2007). Similarly, affectionate communication is linked with positive aspects of well-being, including both life satisfaction (Young et al., 1995) and selfesteem (Schrodt et al., 2007). The findings in this sample of adoptees extend this research into adoption-specific outcomes. Just as parents are formative agents of their child's development, adoptive parents may be important sources of adoption adjustment through communication focused on the value and worth of the adopted child.

Findings linking parental confirmation and affectionate communication with adoptee adjustment also suggest the importance of examining non-adoption-related talk in adoptive families. Research on communication in adoptive families has tended to focus exclusively on adoption-related communication (e.g., Brodzinsky, 2006; Sobol et al., 1994; Wrobel et al., 2003). Findings in the present study demonstrate that communication geared at empowering a child's development as a person and not just as an adoptee may play an important role in adoptee adjustment. In fact, non-adoption-related communication was a stronger predictor in the present study than ACO. Given that adoption-related communication is usually a small component of parent-child communication (Colaner & Kranstuber, 2010), additional research examining the general communicative environment of adoptive families is warranted. For example, family communication patterns theory suggests that families have a general worldview that guides parent-child communication (Koerner & Fitzpatrick, 2002); these family communication patterns explain important variance in adoptive family functioning (Rueter & Koerner, 2008). Understanding how adoption-related disclosures occur within a larger framework of conversation and conformity would likely yield important results that speak to the nuances of adoption communication across a more specific range of parent-child interactions. In addition, given the importance of everyday talk for stepfamilies (Schrodt, Soliz, & Braithwaite, 2008), diary studies about adoption and nonadoption talk could provide important insight into adoptive family communication.

These initial findings about domestic adoption communication provide preliminary insight into the possible role of adoptive parents in encouraging adoptive identity development; however, the cross-sectional nature of the data does not allow for causal claims (a point discussed with greater detail in the "Limitations and Future Research" section). Despite the limited scope of the findings, the role of general family communication in adoptive families seen in the present study may have import for other family forms. Researchers are increasingly turning their attention to families formed through diverse pathways (e.g., stepfamilies, artificial reproductive technologies such as egg and sperm donation) as well as complex family structures (e.g., in-laws, multiethnic families, interfaith families, same sex families), given the decrease in families formed through straightforward biological and legal-based norms (Floyd & Morman, 2013; Galvin, 2004). Researchers examining diverse and/ or complex families should attend to communication specific to the family structure (e.g., communication about the stepfamily, sperm donor-related communication) as well as general family communication. Research that exclusively examines domainspecific communication is likely missing important factors that could explain considerable variance in child welfare. Future research on diverse family forms should include general family communication variables in order to explain important variance and provide context for domain-specific communication. Using moderation analysis could be particularly effective for teasing out the degree to which domainspecific communication is centered within a larger communication environment.

Theoretical Advancements in Adoptive Identity Work

A second implication for the present study is increased insight into contributors to and implications of adoptive identity work. Aggregating findings from the present study and existing research on adoptive identity allow for theoretical advancements in the adoptive identity formation from a communication perspective. Findings here give preliminary support for the role that parental communication may play in adoptive identity work, but the lack of significant findings for reflective exploration indicate that there is much more work to be done in adoptive identity research. Despite clear relationships between adoptive parent communication and preoccupation, positive affect about adoption, and positive affect about birth parents, the degree to which adoptive parent communication facilitates reflective exploration remains somewhat unclear. The influence of parental communication on reflective exploration may be limited. Three possible reasons exist explaining the lack of significant findings in the present study.

First, a potential reason for the lack of significant findings in the present study is based on the changing needs of adoptees over time. The Family Adoptive Communication Model explains that communication about adoption is dynamic as the adopted child's developmental capacities change (Wrobel et al., 2003). Given the fluidity of adoptive parents' communication, certain communication behaviors may be related to adoptive identity work at various stages of the developmental process. In the current study, we conducted cross-sectional research in which we prompted adoptees to provide perceptions of their adoptive parents' communication throughout their upbringing as well as their current state of adoptive identity work. Such a research design does not account for the degree to which adoptive parent communication may have varied throughout the adoptees' upbringing. In addition, the current study does not examine the degree to which adoptive parent communication may have related to various stages of adoptive identity work. The fact that many communication variables were not associated with reflective exploration in the current study does not preclude the possibility that these parental communication behaviors may have contributed to adoptive identity work at earlier stages of the adoptive identity formation process.

Second, Grotevant and colleagues (2000) position adoptive identity as involving three components: the *intrapsychic* component involving intellectual and affective processes, the *relational* component involving how identity is negotiated and enacted within the family, and the *social* component involving interaction in contexts beyond the family unit. In the present study, we focused on the relational component, viewing parental communication as an important contributing factor in the formation of adoptive identity. Although parental communication clearly plays a pivotal role in an adoptee's adjustment to his or her adoption, parental communication is just one part of a larger context of factors culminating to influence one's adoptive identity. Future research should address the intrapsychic and social components to adoptive identity to add additional information about the processes central to promoting reflective exploration.

A final reason for the lack of significant findings is based on individual variation in identity needs of adoptees. Studies examining adoptees' level of uncertainty about their adoption find that individuals range in their responses to their adoption. Many adoptees do not experience a strong sense of loss or uncertainty about their adoption (Colaner & Kranstuber, 2010; Powell & Afifi, 2005). In these cases, adoptees may not begin the adoptive identity formation process due to personal preference or identity needs. Adoptive parents of individuals with low uncertainty or limited adoptive identities may still exhibit the communication behaviors measured in the current study. However, due to individual identity needs, parental communication may not be predictive of adoptive identity for those individuals who are not interested in the exploration or commitment inherent in adoptive identity work.

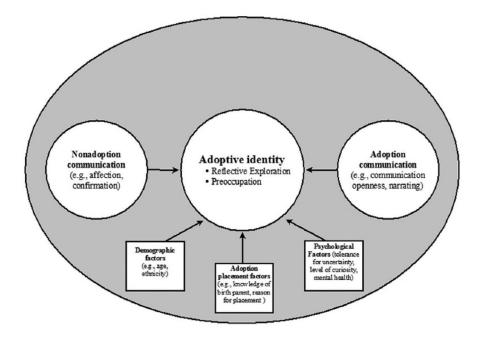


Figure 4. Communication-based conceptual model of adoptive identity development (domestic adoption).

A Communication-Centered Conceptual Model of Adoptive Identity Development

Aggregating existing research, findings from the current study, and the implications discussed above provides the basis for a communication-centered model of adoptive identity development for individuals adopted via domestic adoption. The proposed model is introduced as a roadmap to guide future adoptive identity work; although findings from the current study provide preliminary support for the model, the selfreport, cross-sectional, and non-random nature of the data limit the ability to make definitive and causal claims. The proposed conceptual model builds off of initial findings from the present study to suggest directions for future adoption work. The current study's findings are combined with existing research to form a theoretical future for adoptive identity.

The model depicted in Figure 4 situates adoptive identity at the center with adoption- and non-adoption-related communication factors positioned as predictors. The influence of parental communication on adoptive identity development is conceptualized in a larger framework that includes demographic, adoption placement, and psychological factors. These factors contextualize the nature of adoptive parent communication as well as the relationship between parental communication and adoptive identity. Each model component is discussed below in turn.

A large literature supports the role of adoption-related communication in supporting adoptive identity work. The present study joins a line of research describing the positive outcomes of ACO (Brodzinsky, 2006; Donahue, 2008; Grotevant et al., 2011; Skinner-Drawz et al., 2011). Communication openness, however, is just one of many forms of adoption communication. Galvin (2003, 2006) has described adoption communication at length, noting the important role of discourse dependence strategies in creating and maintaining individual and family identity. Narrating is a discourse dependence strategy that has received considerable attention (Baxter, Norwood, Asbury, Jannusch, & Scharp, 2012; Kranstuber & Kellas, 2011); this line of research has demonstrated that adoptive parents encourage child development and contribute to individual and family identity through the creation and retelling of adoption stories. Parent-child discussions about the meaning of adoption as well as rituals celebrating adoption are additional discourse dependence strategies that play an important identity function in adoptive families (Colaner & Kranstuber, 2010; Docan-Morgan, 2014; Harrigan & Braithwaite, 2010; Wrobel et al., 2003). Adoptive families also negotiate identity with individuals outside of the family by responding to external challenges and/or explaining the family composition to outsiders (Suter, 2008; Suter & Ballard, 2009). The choices of names and labels for the child, parents, and birth parents have import for the identity of the adoptee and adoptive family (Galvin & Colaner, 2013; Suter, 2012). Taking research on these discourse dependence strategies together, adoption communication in various forms are important for adoptees' understanding of adoption and are thus central components of adoptive identity development.

The present study also demonstrates the importance of non-adoption-related communication for adoptive identity, specifically the role of parental confirmation and affectionate communication. Other forms of general parent-child communication are likely relevant to adoptive identity as well. Adoption researchers have begun to examine family communication patterns in adoptive families (Rueter & Koerner, 2008; Samek & Rueter, 2011). This work demonstrates the utility of family communication patterns for providing context for adoption-related interactions; further work documenting the role of conversation and conformity orientation for bolstering adoptee development in general and specifically in relation to adoptive identity holds considerable promise. A vast range of possibilities exist for investigating non-adoptionrelated parent-child communication, including but not limited to perspective taking, privacy regulation, topic avoidance, and communication accommodation. These communication characteristics contribute to adoptive identity directly, as findings from this study as well as previous empirical and theoretical work suggest.

This communication, however, occurs within a larger framework that should also be considered. Three important structural components surround the relationship between adoptive identity and parental communication. First, demographic factors are important to consider. Age plays an important role in adoptive identity development (Grotevant & Von Korff, 2011) and was thus included as a control in the present study. Ethnicity of the adoptee is also an important consideration, as individuals placed via transracial adoption face additional identity tasks (Galvin, 2003; Harrigan & Braithwaite, 2010; Suter, 2008). Adoption placement specifics are also important for individuals' adoptive identity work (Brodzinsky & Pinderhughes, 2002). Individuals who have knowledge of the reasons for their placement and the identity and status of their birth parents have important information to factor into their identity work; without this knowledge, adoptive identity work must take place with considerable unknowns (Colaner & Kranstuber, 2010). These unknowns create difficulty for adoptive identity development. In fact, the difficulty of unknown information is one of the central reasons that contemporary adoption placements have shifted to be predominantly open adoptions, meaning that the birth parents are known and present in the adoptee's life (Atwood, 2007). Adoptees with knowledge of and access to birth parent information exhibit extensive adoptive identity work (Von Korff & Grotevant, 2011; Von Korff, Grotevant, & McRoy, 2006), underscoring the importance of considering the role of the larger birth and adoptive family structure in understanding adoptive identity development.

Finally, psychological/personality factors contribute to the degree to which adoptees engage in adoptive identity work. Adoptees vary in terms of desire to explore the meaning of their adoption. Some individuals are comfortable with not having information about their origins, whereas others struggle with the uncertainty that unknowns create for their identity work; similarly, some individuals have a high level of curiosity about their adoption circumstances, whereas others do not desire to acquire information about their birth parents (Colaner & Kranstuber, 2010). Grotevant et al. (2000) theorized that intrapsychic characteristics shape the adoptive identity development process. As such, characteristics of the individual such as tolerance for uncertainty, level of curiosity, and mental health are important factors to consider within a larger framework of adoptive identity development.

The communication-centered conceptual model of adoptive identity development described above pulls together the findings from the present study as well as existing empirical and theoretical work to give a fuller picture of the important components of adoptive identity development. The current study pulled from the adoption and non-adoption-related components of the model and included age as a demographic factor, explaining some variation in preoccupation but virtually no variation in reflective exploration. Future work that includes additional components from the conceptual model will aid in identifying predictors of reflective exploration and continue to bolster understanding of preoccupation.

The conceptual model not only serves as a touchstone for future adoptive identity research but also provides insight into the current experiences of adoptive identity. The model formalizes a large body of adoption research into a framework that is useful for adoptees, adoptive families, and adoption practitioners interested in aiding individuals in their adoptive identity development. The communication-centered conceptual model, here in its first iteration, can grow and adapt to include new information, as researchers and practitioners generate additional knowledge of the adoptive identity process; thus, the model serves as a heuristic framework for adoptive identity theory and practice.

Limitations and Future Research

Despite the contributions of this research, the results should be interpreted within the limitations of the research design. The first limitation stems from the sample used in the present study. This study utilized a non-random, convenience sample of adult adoptees. As such, the generalizability of these results to the adoptee population is not warranted, as potential sources of bias may be embedded within the sample. In addition, acknowledging the degree to which characteristics of the sample may attenuate the relationships between variables in the present study gives important insight into these findings. Findings in the current study should be interpreted with the potential variation stemming from participants' family structure, internationally adopted status, and motivation for completing the survey in mind. Future research that solicits adoptee participation from more representative groups, such as a wider array of ethnic backgrounds and a more representative sample of men, can provide additional insight into adoptee development. Participants also varied considerably with regard to age. Identity work recurs in a cycle throughout the life span, and older adults tend to have more stable adoptive identities than young adults (Grotevant & Von Korff, 2011). Given the importance of age, we controlled for this in the modeling analysis. Even still, the results should be interpreted in light of the study characteristics.

In addition, participants included individuals adopted via private, domestic adoption, which sets significant limits on the degree to which the model can be generalized across types of adoption. The results do not speak to the experiences of individuals adopted via foster care or international adoption, and the proposed model is limited in scope. Future research should assess the degree to which the proposed model speaks to experiences of those in international and foster care adoption.

Findings must also be interpreted in light of the research design. The self-report nature of the data reflects the retrospective perspective of one individual. Future work that utilizes observational data with more than one individual can provide greater support for the claims of the present study. In addition, the cross-sectional data used in the present study do not allow for causal linkages to be made about the relationships in the present study. Longitudinal data will be an important component of future work assessing the degree to which adoptive parent communication contributes to adoptive identity work.

In short, additional research utilizing a more representative sample of adoptees, adoptees from a wider variety of adoption situations, and more complex research designs should precede the revision of theories supporting the models examined in this study.

Conclusion

As adoption continues to be a viable form of family creation, issues of adoptive identity will be relevant for adoptees and the individuals who call them family, including adoptive parents, immediate family members, extended adoptive family members, birth parents and their extended families, and the adoptee's future

partner and children. Given the number of adoptees in the United States and these significant family ties, the number of persons affected by adoption soars into the tens of millions (Pertman, 2000). As such, adoptive identity is an issue facing a considerable portion of society.

Adoptees face crucial questions of identity as they attempt to make sense of the role of adoption in their sense of self such as, "Where did I come from? Who were my birth parents? Why was I placed for adoption? Do my birth parents think of me now? Do I have birth siblings? What does adoption mean in my life?" (Dunbar & Grotevant, 2004, p. 135). Forming responses to these questions is a primal need for many adoptees as they begin to construct an adoptive identity or an understanding of what it means to be adopted. The current study, empirical and theoretical support from extant adoptive identity and communication research, and the proposed communicationcentered model of adoptive development provide insight into the role of adoptive parent communication as well as the importance of adoptive identity. Overall, this study extends theorizing on adoptive identity, provides insight into the parental communication behaviors and aspects of adoptee adjustment associated with adoptive identity, and underscores the importance of emphasizing the content, nature, and process of communication in understanding the role of parental communication in facilitating adoptee adjustment.

Acknowledgments — The authors would like to thank Dawn O. Braithwaite, Jody Koenig Kellas, and Julia Torquati for insights throughout the duration of this project. The authors would also like to thank the anonymous reviewers for helpful comments that prompted revisions of this manuscript.

Conflicting Interests & Funding – The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. They received no financial support for the research, authorship, and/or publication of this article.

References

- Atwood, T. C. (2007). The jury is in regarding adoption openness. In T. C. Atwood, L. A. Allen, V. C. Ravenel & N. F. Callahan (Eds.), *Adoption factbook IV* (pp. 453-454). Alexandria, VA: National Council for Adoption.
- Barni, D., Leon, E., Rosnati, R., & Palacios, J. (2008). Behavioral and socioemotional adjustment in international adoptees: A comparison between Italian and Spanish adoptive parents' reports. *Adoption Quarterly*, 11, 235-254. doi:10.1080/10926750802569780
- Baxter, L. A., Norwood, K., Asbury, B., Jannusch, A., & Scharp, K. M. (2012). Narrative coherence in online stories told by members of the adoption triad. *Journal of Family Communication*, 12, 265-283. doi:10.1080/15267431.2012.686944
- Benson, P. L., Sharma, A. R., & Roehlkepartain, E. C. (1994). Growing up adopted: A portrait of adolescents and their families. Minneapolis, MN: The Search Institute.
- Bentler, P. M., & Chou, C. P. (1987). Practical issues in structural modeling. Sociological Methods & Research, 16, 78-117.
- Brodzinsky, D. M. (2005). Reconceptualizing openness in adoption: Implications for theory, research, and practice. In D. M. Brodzinsky & J. Palacios (Eds.), *Psychological issues in adoption: Research and practice* (pp. 145-166). Westport. CT: Praeger.

- Brodzinsky, D. M. (2006). Family structural openness and communication openness as predictors in the adjustment of adopted children. *Adoption Quarterly*, 9, 1-18. doi:10.1300/ J145v9n04_01
- Brodzinsky, D. M., & Pinderhughes, E. (2002). Parenting and child development in adoptive families. In M. H. Bornstein (Ed.), *Handbook of parenting* (Vol. 1. pp. 279-311.). Mahwah, NJ: Lawrence Erlbaum.
- Buber, M. (1958). I and thou. New York, NY: Scribner.
- Colaner, C. W. (2014). Measuring adoptive identity: Validation of the Adoptive Identity Work Scale. Adoption Quarterly, 17, 1-24. doi:10.1080/10926755.2014.891546
- Colaner, C. W., & Kranstuber, H. (2010). "Forever kind of wondering": Communicatively managing uncertainty in adoptive families. *Journal of Family Communication*, 10, 236-255. doi:10.1080/15267431003682435
- Docan-Morgan, S. J. (2014). "They were strangers who loved me": Discussions, narratives, and rituals during Korean adoptees' initial reunions with birth families. *Journal of Family Communication*, 14, 352-373.
- Donahue, E. A. (2008). Open communication in adoption and adoptive identity development (Doctoral dissertation). Long Island University, New York City, NY.
- Dunbar, N., & Grotevant, H. D. (2004). Adoption narratives: The construction of adoptive identity during adolescence. In M. W. Pratt & B. H. Fiese (Eds.), *Family stories and the life course: Across time and generations* (pp. 135-161). Mahwah, NJ: Lawrence Erlbaum.
- Ellis, K. (2002). Perceived parental confirmation: Development and validation of an instrument. *Southern Communication Journal*, 67, 319-334.
- Enders, C. K. (2010). *Applied missing data analysis (Methodology in the Social Sciences Series)*. New York, NY: Guilford Press.
- Erikson, E. H. (1968). Identity: Youth and crisis. New York, NY: W.W. Norton.
- Floyd, K., & Morman, M. T. (1998). The measurement of affectionate communication. Communication Quarterly, 46, 144-162.
- Floyd, K., & Morman, M. T. (2000). Affection received from fathers as a predictor of men's affection with their own sons: Tests of the modeling and compensation hypotheses. *Communication Monographs*, 67, 347-361.
- Floyd, K., & Morman, M. T. (2005). Fathers' and sons' reports of fathers' affectionate communication: Implications of a naive theory of affection. *Journal of Social and Personal Relationships*, 22, 99-109.
- Floyd, K., & Morman, M. T. (2013). *Widening the family circle* (2nd ed.). Thousand Oaks, CA: SAGE.
- Galvin, K. (2003). International and transracial adoption: A communication research agenda. *Journal of Family Communication*, *3*, 237-259. doi:10.1207/S15327698JFC0304_5
- Galvin, K. (2004). The family of the future: What do we face? In A. L. Vangelisti (Ed.), *The handbook of family communication* (pp. 675-687). Mahwah, NJ: Lawrence Erlbaum.
- Galvin, K. (2006). Diversity's impact on defining the family. In L. H. Turner & R. West. (Eds.), *The family communication sourcebook* (pp. 3-19). Thousand Oaks, CA: SAGE.
- Galvin, K., & Colaner, C. (2013). Created through law and language: Communicative complexities of adoptive families. In K. Floyd & M. T. Morman (Eds.), Widening the family circle (2nd ed., pp. 191-209). Thousand Oaks, CA: SAGE.
- Geldhof, G. J., Pornprasertmanit, S., Schoemann, A. M., & Little, T. D. (2013). Orthogonalizing through residual centering: Extended applications and caveats. *Educational and Psychological Measurement*, 73, 27-46. doi:10.1177/0013164412445473

- Grotevant, H. D. (1997). Coming to terms with adoption: The construction of identity from adolescence into adulthood. *Adoption Quarterly*, 1, 3-27. doi:10.1300/J145v01n01_02
- Grotevant, H. D., Dunbar, N., Kohler, J. K., & Esau, A. M. L. (2000). Adoptive identity: How contexts within and beyond the family shape developmental pathways. *Family Relations*, 49, 379-387. doi:10.1111/j.1741-3729.2000.00379.x
- Grotevant, H. D., Fravel, D., Gorall, D., & Piper, J. (1999). Narratives of adoptive parents: Perspectives from individual and couple interviews. In B. Fiese, A. Sameroff, H. Grotevant, F. Wambolt, S. Dickstein & D. Fravel (Eds.), *The stories that families tell: Narrative coherence, narrative interaction, and relationship beliefs* (pp. 69-81). Malden, MA: Blackwell.
- Grotevant, H. D., & McRoy, R. (1998). *Openness in adoption: Exploring family connections*. Thousand Oaks, CA: SAGE.
- Grotevant, H. D., Rueter, M., Von Korff, L. A., & Gonzalez, C. (2011). Post-adoption contact, adoption communicative openness, and satisfaction with contact as predictors of externalizing behavior in adolescence and emerging adulthood. *Journal of Child Psychology and Psychiatry*, 52, 529-536. doi:10.1111/j.1469-7610.2010.02330.x
- Grotevant, H. D., & Von Korff, L. A. (2011). Adoptive identity. In S. J. Schwartz, K. Luyckx & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 585-601). New York, NY: Springer.
- Harrigan, M. M., & Braithwaite, D. O. (2010). Discursive struggles in families formed through visible adoption: An exploration of dialectical unity. *Journal of Applied Communication Research*, 38, 127-144.
- Jones, C., & Hackett, S. (2008). Communicative openness within adoptive families: Adoptive parents' narrative accounts of the challenges of adoption talk and the approaches used to manage these challenges. *Adoption Quarterly*, 10, 157-178. doi:10.1080/10926750802163238
- Kline, R. B. (2005). Principle and practice of structural equation modeling. New York, NY: Guilford Press.
- Koerner, A. F., & Fitzpatrick, M. A. (2002). Toward a theory of family communication. International Communication Association, 12(12), 70-91.
- Kohler, J. K., Grotevant, H. D., & McRoy, R. G. (2002). Adopted adolescents' preoccupation with adoption: The impact on adoptive family relationships. *Journal of Marriage and Family*, 64, 93-104. doi:10.1111/j.1741-3737.2002.00093.x
- Kotz, J., Krishnan, A., & Wickersham, J. (2007, November). Structural equation modeling: The state of the art in communication science. Paper presented at the National Communication Association, Chicago, IL.
- Kranstuber, H., & Kellas, J. K. (2011). "Instead of growing under her heart, I grew in it": The relationship between adoption entrance narratives and adoptees' self-concept. *Communication Quarterly*, 59, 179-199. doi:10.1080/01463373.2011.563440
- Little, T. D. (2013). Longitudinal structural equation modeling (Methodology in the Social Sciences Series). New York, NY: Guilford Press.
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling*, *9*, 151-173.
- Marcia, J. E. (1993). The identity status approach to ego identity. In J. E. Marcia & D. R. Waterman (Eds.), *Ego identity: A handbook for psychosocial research* (pp. 1-21). New York, NY: Springer-Verlag.
- McRoy, R. G., Grotevant, H. D., Lopez, S. A., & Furuta, A. (1990). Adoption revelation and communication issues: Implications for practice. *Families in Society*, 71, 550-557.

- Mendenhall, T. J., Berge, J. M., Wrobel, G. M., Grotevant, H. D., & McRoy, R. G. (2004). Adolescents' satisfaction with contact in adoption. *Child and Adolescent Social Work Journal*, 21, 175-190. doi:10.1111/j.1469-7610.2010.02330.x
- Moyer, A. M., & Juang, L. P. (2011). Adoption and identity: Influence on emerging adults' occupational and parental goals. *Adoption Quarterly*, 14, 1-17.
- Muthen, L. K., & Muthen, B. (2010). Mplus user's guide (Version 6). Los Angeles, CA: Author.
- Passmore, N., Feeney, J. A., & Foulstone, A. R. (2007). Secrecy within adoptive families and its impact on adult adoptees. *Family Relationships Quarterly*, 5, 3-5.
- Pertman, A. (2000). Adoption nation: How the adoption revolution is transforming our families and America. New York: Basic Books.
- Powell, K. A., & Afifi, T. D. (2005). Uncertainty management and adoptees' ambiguous loss of their birth parents. *Journal of Social and Personal Relationships*, 22, 129-151. doi:10.1177/0265407505049325
- R Core Team. (2014). *R: A language and environment for statistical computing*. Vienna, Austria: R Foundation for Statistical Computing. Available from http://www.R-project.org/
- Rijk, C. H. A. M., Hoksbergen, R. A. C., & ter Laak, J. (2008). Education after early-life deprivation: Teachers' experiences with a clinical group of deprived Romanian adopted children. Adoption Quarterly, 11, 255-277. doi:10.1080/10926750802569806
- Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, 48, 1-36. Retrieved from http://www.jstatsoft.org/v48/i02/
- Rueter, M. A., & Koerner, A. F. (2008). The effect of family communication patterns on adopted adolescent adjustment. *Journal of Marriage and Family*, 70, 715-727.
- Samek, D. R., & Rueter, M. A. (2011). Associations between family communication patterns, sibling closeness, and adoptive status. *Journal of Marriage and Family*, 73, 1015-1031.
- Schoenberg, C. (1974). On adoption and identity. Child Welfare, 53, 549.
- Schrodt, P., Ledbetter, A. M., & Ohrt, J. K. (2007). Parental confirmation and affection as mediators of family communication patterns and children's mental well-being. *Journal of Family Communication*, 7, 23-46.
- Schrodt, P., Soliz, J., & Braithwaite, D. O. (2008). A social relations model of everyday talk and relational satisfaction in stepfamilies. *Communication Monographs*, 75, 190-217. doi:10.1080/03637750802023163
- Skinner-Drawz, B. A., Wrobel, G. M., Grotevant, H. D., & Von Korff, L. A. (2011). The role of adoption communicative openness in information seeking among adoptees from adolescence to emerging adulthood. *Journal of Family Communication*, 11, 181-197. doi:10.1080/15267431003656587
- Sobol, M. P., Delaney, S., & Earn, B. M. (1994). Adoptees' portrayal of the development of family structure. *Journal of Youth and Adolescence*, 23, 385-401.
- Suter, E. A. (2008). Discursive negotiation of family identity: A study of U.S. families with adopted children from China. *Journal of Family Communication*, 8, 126-147. doi:10.1080/15267430701857406
- Suter, E. A. (2012). Negotiating identity and pragmatism: Parental treatment of international adoptees' birth culture names. *Journal of Family Communication*, 12, 209-226. doi:10.10 80/15267431.2012.686940
- Suter, E. A., & Ballard, R. L. (2009). "How much did you pay for her?" Decision-making criteria underlying adoptive parents' responses to inappropriate remarks. *Journal of Family Communication*, 9, 107-125. doi:10.1080/15267430902773253

- Suter, E. A., Baxter, L. A., Seurer, L. M., & Thomas, L. J. (2014). Discursive constructions of the meaning of "family" in online narratives of foster adoptive parents. *Communication Monographs*, 81, 59-78. doi:10.1080/03637751.2014.880791
- Von Korff, L. A., & Grotevant, H. D. (2011). Contact in adoption and adoptive identity formation: The mediating role of family conversation. *Journal of Family Psychology*, 25, 393-401. doi:10.1037/a0023388
- Von Korff, L. A., Grotevant, H. D., Koh, B. D., & Samek, D. R. (2010). Adoptive mothers: Identity agents on the pathway to adoptive identity formation. *Identity*, 10, 122-137. doi:10.1080/15283481003711767
- Von Korff, L. A., Grotevant, H. D., & McRoy, R. G. (2006). Openness arrangements and psychological adjustment in adolescent adoptees. *Journal of Family Psychology*, 20, 531-534. doi:10.1037/0893-3200.20.3.531
- Wrobel, G. M., Kohler, J. K., Grotevant, H. D., & McRoy, R. G. (2003). The Family Adoption Communication (FAC) Model: Identifying pathways of adoption-related communication. *Adoption Quarterly*, 7, 53-84. doi:10.1300/J145v07n02_04
- Young, M. H., Miller, B. C., Norton, M. C., & Hill, E. J. (1995). The effect of parental supportive behaviors on life satisfaction of adolescent offspring. *Journal of Marriage and Family*, 57, 813-822.

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