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The Role of Adoption Communicative Openness in Information Seeking Among Adoptees From Adolescence to Emerging Adulthood

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Abstract

Adoption Communicative Openness was examined as a predictor of information seeking from adolescence to emerging adulthood in a group of adoptees who did not have direct contact with birth relatives during adolescence. Changes in information seeking intentions and behaviors between adolescence and emerging adulthood were also examined. Data from 119 infant-placed adoptees and their adoptive mothers were used from Waves 2 (1996–2000) and 3 (2005–2008) of the Minnesota-Texas Adoption Research Project (Grotevant & McRoy, 1998). Adoptive mothers' Communicative Openness was positively associated with degree of information seeking in emerging adulthood. Degree of information seeking between adolescence (Wave 2) and emerging adulthood (Wave 3) increased for the majority of adoptees (62.2%). Approximately 16% of adoptees experienced no change in information seeking and 22% of adoptees experienced a decrease in information seeking. Females were more likely to exhibit a greater increase in information seeking change between Waves 2 and 3 and information seeking at Wave 3 than males. Results suggest that adoptee information seeking is a dynamic process that takes place over several life stages and that open communication about adoption within the adoptive family supports adoptee information seeking.

Adoptive families are becoming increasingly prevalent in the United States as the population of domestically and internationally adopted children continues to grow (Zamostny, Wiley, O'Brien, Lee, & Baden, 2003). What is unique for adoptees and their adoptive families is that they are connected to another family—the child's birth family—about which they may have little or no information. Many, but not all, adopted individuals desire to seek unknown information about their backgrounds. Those who do not have contact with their birth families may wish to establish it. Postadoption counselors estimate that between 40–50% of adoptees seek background information about or contact with birth relatives (Feast & Howe, 1997). Feast and Howe (1997) found that 64% ($N = 234$) of participants in their study of adopted adult seekers were successful in making some form of contact.

Several aspects of adoptee information seeking remain unclear, as the focus of much previous research has been on adult adoptees' reunions with birth mothers (Müller & Perry, 2001). A broader context across developmental stages, with a focus on how adoption is discussed in families, is essential for understanding the complexity of seeking out new information about one's adoption and birth family.

What is Information Seeking?

Information seeking is considered the "gathering of information previously unknown to an adopted person about his or her adoption and birth family" (Wrobel & Dillon, 2009, p. 223). Some adopted persons choose to seek information and others do not. Information seeking takes place on a continuum of intention and activity which includes no desire to seek, actively seeking, and sought and obtained desired information. The process of seeking information and/or contact has traditionally been known as "searching," with the understanding that a search for members of the birth family takes place and that the establishment of contact is the ultimate goal of the search.

Yet, some adopted individuals may not desire birth family contact, but instead may want information about topics such as family members' appearance, medical or health history, or identity. More recently the broader term "information seeking" has been used to acknowledge that adoptees engage in activities other than the traditional search for birth relatives in an attempt to gain information about their backgrounds and themselves (Wrobel & Dillon, 2009). Desired information can be sought from varied sources such as birth and adoptive family members, adoption agencies, and birth records. Information seeking can involve active (no direct interaction with birth family members) and interactive (face-to-face interaction with birth family members) strategies (Berger, 2002).

For example, information seeking may include active strategies such as asking one's adoptive parents what they know about the birth family, searching the internet, looking through adoption agency files, or perusing year books at the high school attended by a birth parent and interactive strategies such as directly asking one's birthmother about one's birthfather.

Most research about information seeking focuses on the experience of adoptees who have sought information or contact. A handful of studies have also explored the characteristics of adoptees who choose not to seek¹ (Aumend & Barrett, 1984; Borders, Penny, & Portnoy, 2000; Cubito & Obremski Brandon, 2000). These studies have shown that nonseekers are just as well-adjusted as adoptees who do seek (Cubito & Obremski Brandon, 2000). Deciding whether or not to look for information or establish contact is a unique experience for all adoptees. Positive or negative antecedents and consequences associated with seeking or not seeking may not be generalized to all adoptees.

It is important to differentiate information seeking from curiosity. Curiosity is the motivation for information or knowledge that stimulates exploratory activity (Loewenstein, 1994). The exploratory activities that may result from adoption related curiosity include information seeking to fill the perceived gap in known information. Information seeking in the context of curiosity as a motivator is thus conceptualized as a strategic, goal-directed activity (Berger, 2002).

¹The term "seeking" used throughout the manuscript refers to activity that includes looking for information about and/or establishing contact with birth relatives.

Information seeking, age, and gender

Adoptees may begin experiencing the desire to seek information during adolescence, but those adoptees who choose to search typically do not do so until adulthood (Pacheco & Eme, 1993; Wrobel, Grotevant, & McRoy, 2004). In their analysis of 366 adoptees' records, Feast and Howe (1997) found that only 12% of adoptees sought information about their backgrounds before their 20th birthdays. Reaching age 18, when adoptees in some states are legally able to access records without consent of their adoptive parents, may also stimulate information seeking.

The majority of adult adoptees who have participated in studies on information seeking are women, with female participation rates as high as 63% (Howe & Feast, 2001) and 90% (Campbell, Silverman, & Patti, 1991). Since most of these studies used convenience samples it is not clear whether this is indicative of a gender difference in the rate of information seeking in the general adoptee population (Bertocci & Schechter, 1991) or whether women who seek information are more likely to participate in research studies on information seeking.

Wrobel et al. (2004) did not find a significant relationship between gender and information seeking status among adopted adolescents in the same sample on which this study is based. However, an analysis was done within gender, and boys were "disproportionately skewed towards not searching" (Wrobel et al., 2004, p. 141). Sobol and Cardiff (1983) also did not find a significant association between gender and degree of information seeking, although women were more represented at each level of information seeking than were men in their convenience sample. It is helpful to examine effects of gender on information seeking in the current study in order to provide a springboard from which to explore whether males and females experience this significant adoption-related activity differently, including reasons for seeking, the ways in which seeking occurs, and types of information sought.

Gender effects may occur as a result of different socialization practices and subsequent identity formation (Gilligan, 1982; Ruble & Martin, 1998), different experiences of life cycle events (Campbell et al., 1991; Kowal & Schilling, 1985), or different ways of relating to family and kin (Johnson, 2000; Silverstein, Parrott, & Bengtson, 1995), for example.

Adoption Communicative Openness and Information Seeking

The creation of an "open, honest, nondefensive, and emotionally attuned family dialogue" (Brodzinsky, 2005, p. 151) regarding adoption issues is referred to as Adoption Communicative Openness (ACO). Flexible communication in the adoptive family that balances the "complex knot of contradictory interplays" (Baxter, 2004, p. 10) is associated with several aspects of adoptive adoptee development, including the desire for information about one's background (Brodzinsky, 2005; Wrobel, Kohler, Grotevant, & McRoy, 2003). Campbell et al. (1991) found that it may be easier for adoptees to initiate information seeking if family members are open and able to adapt the way they discuss adoption. Conversely, lack of flexible communication in the adoptive family regarding adoption-related issues is thought to negatively impact children's development (Kirk, 1964).

Children may have difficulty expressing their curiosity, their parents may feel threatened by questions regarding adoption, and family relationships could be subsequently adversely affected (McRoy, Grotevant, Ayers-Lopez, & Furuta, 1990). Ultimately, finding a middle ground between the dialectics of rejection of and insistence upon difference between adoptive and nonadoptive families will best serve adoptees and their families. Families characterized by ACO will have an atmosphere that supports finding that middle ground. Parents who are able to acknowledge yet not insist upon differences between their adoptive

family and non-adoptive families will create an open, nondefensive atmosphere that supports the adopted child's curiosity and maintains communicative openness regarding adoption-related issues (Brodzinsky, 2005).

ACO may be understood within the context of Relational Dialectics Theory, which "views communication in relationships as the dialectical tension of contradictory verbal-ideological forces" (Baxter, 2004, p. 10). Relational Dialectics Theory provides one appropriate theoretical framework for explicating the multiple contradictions inherent in family communication about and interactions surrounding adoption. For example, the dialectic of integration/separation may be experienced in adoptive parents' interactions as they dialogically attempt to support the adoptee's dual connection to the adoptive family and birth family. They may integrate birth family information while also acknowledging with their child the obvious separation from birth family and integration into the adoptive family that occurs as a result of adoption. The dialectical experience of certainty and uncertainty may be predominant for adoptive parents as they discuss and decide whether to assist adoptees in information seeking endeavors which might include concern regarding how a search will impact the adoptee personally as well as adoptive family relationships.

Openness/nonexpression (or closedness) is perhaps the central dialectic inherent in Adoption Communicative Openness. Harrigan (in press) found that the dialectic of openness/closedness characterized adoptive parents' experiences of managing whether or not to discuss adoption-related information with their children. Parents tended toward closedness until an event occurred that triggered openness, but they also initiated openness in communication on certain occasions. They openly discussed some topics with their children while remaining closed or not providing detail about others after taking into consideration the developmental stage of the adoptee. Ultimately, ACO involves flexibility in communication. The dialectical nature of ACO is due in large part to the necessity to appropriately adjust family communication about adoption-related issues (such as information seeking) to the needs and developmental stages of family members.

The Family Adoption Communication (FAC) Model (Wrobel et al., 2003) posits three phases of communication about adoption encountered by adoptive families over the course of their family life cycles. First, adoptive parents may provide unsolicited information to their children about their adoptions and birth families. They may then address their children's growing curiosity by responding to questions they may have. Finally, adoptees may begin seeking information independently of their parents if they wish to do so.

Communication Privacy Management theory (Petronio & Caughlin, 2006) highlights the dynamic nature of privacy choices during these three phases of a family's adoption communication life cycle. During the first phase, adoptive parents set a "privacy boundary" which defines what information to share with their child and when to share it (Caughlin & Petronio, 2004).

Privacy boundaries evolve as adoptees mature and adoptive parents create "linkages" by increasingly including their children in the ownership of private information. Finally, when adoptees seek information independently they own the adoption-related information and grant or deny access to others, including their adoptive parents. The degree of permeability of privacy boundaries within families reflects the extent to which private information is revealed and is influenced by the perceived risk in sharing that information (Caughlin & Petronio, 2004). Permeability varies across the phases of the FAC model and is reflected in the degree of Adoption Communicative Openness as adoptive families negotiate access to adoption-related information.

The FAC model provides a general guide to family communication over the course of the adoptive family life cycle, however it is also understood that the dialogic activity within adoptive families does not necessarily or absolutely follow such a neat pathway. Baxter (2004) reminds us that turning points within an adoptive family's history will create "moments of heightened dialogic activity" that will contribute to the construction of adoptive family identity "... in what can be an erratic process of backward-forward, up and down motion" (Baxter, 2004, p. 11). In other words, although adoptive parents are assumed to provide unsolicited information to their young children in the first phase of the FAC model, information seeking activity by the adoptee as an adult during the third phase may also facilitate adoptive parent disclosure of information thus creating a moment of heightened dialogue and additional family relationship development.

Research Questions

Adoptees typically begin thinking about whether or not to seek information or contact in adolescence yet most do not act on their intentions until emerging adulthood. One way in which adoptive parents may support their adoptee's curiosity about their origins and potential desire to seek information is through open communication about adoption-related issues. The degree to which adoption communicative openness when adoptees are adolescents supports information seeking in emerging adulthood, however, is unknown. This study therefore addresses the following research question: *How is adoption communicative openness associated with information seeking in emerging adulthood?*

It is likely that the developmental tasks encountered by adoptees during adolescence and emerging adulthood and the transition between these life stages influence the creation of "information gaps" (Wrobel & Dillon, 2009), which may or may not result in desire for information about birth family and subsequent seeking in emerging adulthood. Existing research, however, does not indicate whether desires or intentions (or lack thereof) to seek in adolescence remain stable into emerging adulthood. This study therefore describes the changes in information seeking intentions that occur for adoptees between adolescence and emerging adulthood and responds to the following research question: *How are gender and age associated with change in information seeking?*

METHODS

Participants

Participants were drawn from a sample of adoptive families who participated at Waves 2 (1995–2000) and 3 (2006–2007) of the Minnesota-Texas Adoption Research Project (MTARP) (Grotevant & McRoy, 1998). The full Wave 1 (1987–1992) sample was recruited through 35 adoption agencies in 23 states from all regions of the United States. Adoption agencies were trained to randomly sample a specified number of target children from adoptive families with varying levels of structural openness who met the following criteria: the adoptee was between the ages of 4 and 12; the adoption took place before the adoptee was one year old; and the adoptive parents remained married postadoption.

Exclusion criteria for the sample included families with children who were adopted transracially, internationally, or were considered special needs so that factors found to contribute to adjustment independent of structural openness would not confound the effects of openness on adjustment. A small number of families (6.3%) were recruited through newspaper and periodical advertisements. The Wave 1 sample included both parents in 190 adoptive families and at least one adopted child in 171 of the families. The full Wave 2 sample included 173 adoptive mothers, 162 adoptive fathers, and 156 adopted adolescents

from 177 adoptive families. The full Wave 3 sample included 150 adoptive mothers, 133 adoptive fathers, and 169 adopted emerging adults.

Data used for this study come from a subsample of 119 adoptees who participated at Waves 2 (1995–2000) and 3 (2006–2007) of MTARP. Data used in the present study were gathered from participants when they were adolescents (Wave 2) and again when they were emerging adults (Wave 3). Participants in this subsample had no direct contact with birth family members at adolescence. Those participants who had contact with and already knew a member of their birth family at adolescence were not included in this study. Adoption communicative openness was coded from adoptive mothers' Wave 2 interviews.

The rationale behind using mothers' data is that no children reported asking questions about birth parents only of their adoptive fathers in a study of 59 children from the MTARP sample (Wrobel, Kohler, Grotevant, & McRoy, 1998). If adolescents reported asking questions of their adoptive fathers they also asked questions of their adoptive mothers, whereas the reverse was not true. Therefore, data collected at Wave 2 from adoptive mothers of the adopted participants in the subsample were also included.

The subsample consisted of 59 males and 60 females. At Wave 2 they were between the ages of 11.9 and 20.8 (mean = 15.9). At Wave 3, range in age was 21 to 29.5 (mean = 25.2). Participants in the subsample are therefore distinctly within the stage of emerging adulthood which spans the late teens and twenties and is reached by age 30 (Arnett, 2000). The majority of emerging adults identified as White; four identified as Hispanic/Mexican American, and one identified as Black/African American. Approximately 20% of the adopted emerging adults were married and 20% had children. Fifty percent had earned at most a high school diploma, GED, or high school equivalency degree; about 14% had earned at most an associate or junior college degree; about 33% had earned at most a bachelor's degree; and, almost 3% had earned at most a master's degree. Twenty-one percent were attending school full-time and about 7% were attending school part-time. The majority of participants (80%) reported living in their own place (e.g., apartment, house, etc.) and paying all or more than half of their housing expenses (60%).

Age at Wave 2 of the adoptive mothers for whom data were used in this study ranged from 40 to 55 (mean = 47.2). Ninety-five percent were married, 4% were divorced, and 1% was separated. The majority of mothers were White; the remaining mothers included one Black/African American mother, one Hispanic/Mexican American mother, and one Native American mother. Twenty-five percent of mothers had completed high school and approximately 50% had completed between 1 and 4 years of college. Almost 17% had completed some graduate school.

Procedures

Wave 2—Adoptive families were seen in their homes during a single session lasting between 4 and 5 hours. The visit included separate semi-structured interviews with each adoptive parent and the adopted adolescent, administration of questionnaires, and administration of a family interaction task. Family members who were not present for the session (e.g., living away from home) were interviewed by telephone and were mailed questionnaires.

Wave 3—Adopted emerging adults completed interviews via secure, password-protected Internet chat-sites and were administered online questionnaires protected by secure socket layer web technology. Participants first completed the online interviews which were conducted by trained graduate level or undergraduate interviewers. They were then able to complete the online questionnaires. Participants were able to enter, save, and edit their

responses on the questionnaires until they were ready to submit their final responses. Paper-and-pencil measures and telephone interviews were made available to participants who did not have internet access or who had disabilities that precluded their use of the internet.

Measures

Adopted adolescent interview (Wave 2)—The adolescent interview included questions about general adoption experiences as well as issues specific to the level of openness in the adolescent's adoption. It was intended to elicit open discussion of the adolescent's experiences, feelings, knowledge, and attitudes about his or her adoption, adoptive identity, adoptive family situation, and birth parents. Adolescent interviews typically lasted between 1 and 2 hours.

Adoptive parent interview (Wave 2)—The adoptive parent interview consisted of questions that covered a range of adoption-related topics including experiences of being a member of an adoptive family in society, the relationship with the child, views about the family's experiences with contact or lack thereof with birth family, views about different structural openness arrangements (the degree of contact between adoptive and birth families), and desires for the future regarding relationships with birth family members.

Adopted emerging adult interview (Wave 3)—The emerging adult interview was divided into three different sections. Data used in this study come from the first section of the interview, which focused on adoption and included questions about information seeking intentions and behavior. The entire interview typically lasted between 3 and 6 hours.

Variables

Coding schemes were developed to assess adoption communicative openness, information-seeking in adolescence, and information-seeking in emerging adulthood. Ratings for all variables were based on the entire interview transcript at the relevant wave. All transcripts were coded by undergraduates, graduate students, or the principal investigators because judgments required moderate to high levels of inference. Coders were required to attain percent agreement of .80 or better on at least two transcripts before coding independently.

Weighted kappas were used for final reliability estimates, because they fully correct for chance agreement while also adjusting for the degree of disagreement between coders (Cohen, 1968). Kappa coefficients below .41 are considered fair, coefficients between .41 to .60 are considered moderate, and .61 and higher are considered substantive (Landis & Koch, 1977). Coders met to compare ratings and resolve disagreements through discussion for the transcripts that were double-coded. A final rating was chosen based on consensus between the two coders.

Adoption communicative openness (ACO) (Wave 2)—Degree of ACO was rated from adoptive mother interviews using a coding scheme developed by Neil, Grotevant, and Young (2006). Approximately 45% of all transcripts were coded independently by two coders (weighted kappas ranged from .42 to .65 with a mean of .58). A 5-item scale was created ($\alpha = .91$) consisting of 1) communication with the child about adoption, 2) promotion of the child's dual connection to two families, 3) empathy with and tolerance of the child's feelings about adoption, 4) communication with the birth family, and 5) empathy for birth relatives. Items were scored on 5 point scales (1 = low and 5 = high) and summed.

Communication with the child about adoption describes the adoptive mother's willingness to talk about adoption-related issues in a developmentally appropriate way with the child and the extent to which she promotes a climate of openness about adoption related issues within

the adoptive family. *Promotion of the child's dual connection to two families* is about the extent to which the adoptive mother feels personally comfortable with the reality that her child has another family (birth family) and that even though her child is a member of the adoptive family he or she still has a lifelong connection to the birth family both in terms of genetic relatedness but also in terms of the child's actual or potential desire to know and have feelings about his or her birth family.

Empathy with and tolerance of the child's feelings about adoption is about the extent to which the adoptive mother is willing to consider and is comfortable with the full range of the child's feelings about being adopted, including those feelings in the child that are experienced as negative or threatening to the parent. *Communication with the birth family* reflects the adoptive mother's attitude toward communication and contact with the birth family, regardless of whether communication is actually occurring, and when communication is occurring, how the adoptive mother behaves and feels about this communication.

Empathy for birth relatives reflects the adoptive mother's capacity to nonjudgmentally take the perspective of the birth relative, including the ability to think about the reasons why the child needed to be adopted, the ability to think about the birth relative's current position and behavior in relation to contact, and the ability to think about how the birth relative may feel about the adoption.

Adolescent information seeking (Wave 2)—Adolescent information seeking was coded from the adolescent interview at Wave 2. All transcripts were coded independently by two coders. Adolescents were categorized into five different groups based on the degree to which they were seeking information about or contact with their birth parents. Adolescents in Group 1 (will not seek information) made strong statements that they would not seek information in the future. Those in Group 2 (weak interest) stated they most likely would not seek information or contact but left open the slight possibility. Those in Group 3 (moderate interest) said they might seek information about or search for birth relatives in the future and included those adolescents who left open the possibility of information seeking but expressed ambivalence about it. Adolescents in Group 4 (strong interest) said they would definitely seek information or search for birth parents in the future. Those in Group 5 (actively seeking) had already taken some action toward obtaining information or contact with birth relatives.

Emerging adult information seeking (Wave 3)—Emerging adult information seeking was coded from the emerging adult interview at Wave 3. At least 50% of all transcripts were coded independently by two coders (weighted kappa was .87). Emerging adults were categorized into six different groups based on the degree to which they were seeking information about or contact with their birth mothers. Groups 1 through 5 were the same as the adolescent information seeking groups at Wave 2. Group 6 included emerging adults who sought and obtained their desired information or contact between Waves 2 and 3.

Change in information seeking (difference scores)—Information seeking difference scores were created by subtracting the five-level Wave 2 information seeking group number from the six-level Wave 3 information seeking group number for each adoptee who participated at both waves (see Table 1). At Wave 2, the group number into which participants were categorized was based on birth parents together while the Wave 3 group number was separated into information seeking about birth mother and information seeking about birth father. The information seeking group number for birth mothers at Wave 3 was used to calculate information seeking over time for all participants. The rationale behind this decision is that participants tend to discuss birth mothers more than their birth

fathers (Wrobel & Dillon, 2009). The Wave 2 scores are, therefore, more reflective of information seeking intentions regarding birth mothers than birth fathers. Possible difference scores ranged from -4 to +5 with negative scores indicating a greater degree of information seeking at Wave 2 than at Wave 3. Positive scores indicated greater degree of information seeking at Wave 3 than at Wave 2. Score of zero indicated no change in information seeking between Waves 2 and 3. Difference scores do not indicate where on the information seeking spectrum change in information seeking between Waves 2 and 3 actually took place.

Data Analysis Plan

Mplus version 5.1 was used to conduct statistical analyses for the present study (Muthén & Muthén, 2008). Data were screened for normality, linearity, homoscedasticity, outliers, ill-scaling, and multicollinearity prior to conducting analyses (Kline, 2005). Robust maximum likelihood (MLR), which provides standard errors and a chi-square test statistic robust to non-normality, was used to estimate parameters. Goodness of fit was evaluated using four indices (Browne & Cudeck, 1993). The chi square statistic should be relatively low compared to the degrees of freedom (Kline, 2005). The Root Mean Square Error of Approximation (RMSEA) should be between .05 and .08 for an acceptable fit and .05 or less for a good fit (McDonald & Ho, 2002). The Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI; non-normed fit index (NNFI)), should be .90 or greater for acceptable fit and .95 or greater for good fit (Hu & Bentler, 1999).

Missing Values Analysis

Data from 119 cases were available for Mplus analyses. Complete data were available for at least 80 cases for all analyses. Missing data at Wave 3 on information seeking were not associated with Wave 2 information seeking scores. According to Schafer and Graham (2002), it is preferable to use a reliable estimation procedure rather than case deletion to recover missing data when missing data are unrelated to the study outcome. Each analysis was conducted with and without listwise deletion of missing data in order to examine whether the results might be biased by missing data. Findings were similar for each analysis. Results of Mplus analyses reported in the present study used full-information maximum-likelihood.

RESULTS

Structural equation modeling was used to test whether adoption communicative openness (ACO) at Wave 2 when adoptees were adolescents is significantly associated with information seeking at Wave 3 when the adoptees were emerging adults. Predictors were ACO, Wave 2 information seeking, Wave 3 age, and gender. Standardized estimates and t-values for the estimated structural model are shown in Figure 1. The hypothesized structural model showed a good fit to the data $\chi^2(4) = 38.10$; $p < .01$; RMSEA $< .001$, CFI = 1.00, and TLI = 1.00. The predictors accounted for almost 39% of variability in information seeking at Wave 3. There were significant associations between ACO and Wave 3 information seeking $\beta = .27$, ($t = 3.17^2$), Wave 2 information seeking and ACO $\beta = .26$, ($t = 2.76$), and Wave 2 information seeking and Wave 3 information seeking $\beta = .37$, ($t = 3.50$). The association between gender and Wave 3 information seeking was also significant $\beta = .28$, ($t = 3.43$) with females having higher levels of information seeking at Wave 3 than males.

A second structural equation model was tested to determine whether gender and age were associated with change in information seeking between Wave 2 (adolescence) and Wave 3

²A significant coefficient is indicated when $t \geq 1.96$.

(emerging adulthood). Standardized estimates and t -values for the estimated structural model are shown in Figure 2. The structural model showed a good fit to the data $\chi^2(2) = 9.59$; $p < .01$; RMSEA $< .001$, CFI = 1.00, and TLI = 1.00. The model accounted for 13% of variability in information seeking change between adolescence and emerging adulthood.

There was a significant association between gender and change in information seeking score between adolescence and emerging adulthood, $\beta = .33$, ($t = 3.31$), with females experiencing greater increase in information seeking change between Waves 2 and 3 than males. There was no significant association between age in emerging adulthood and information seeking change, $\beta = -.13$, ($t = -1.08$). A majority of adoptees (62.2%; $n = 51$) increased their level of information seeking between adolescence and emerging adulthood. Slightly over 20% ($n = 17$) experienced no change and 17% ($n = 14$) decreased their level of information seeking.

DISCUSSION

Many adopted persons know little or nothing about their birth families; others have more information or contact. Some adoptees choose to seek information about or contact with birth family in order to fill the “gaps” created by desired, unknown information; others are satisfied with the amount of information they have, even if that is nothing (Wrobel & Dillon, 2009). Results of this study indicate that information seeking is an evolving process for adoptees that involves possible modest changes in intentions and behaviors across adolescence and emerging adulthood.

Adoption Communicative Openness and Information Seeking

The current study revealed that emerging adults' information seeking intentions are significantly associated with Adoptive Communicative Openness when adoptees were adolescents. It is likely that the adoption communicative openness established by adoptive parents when their adoptees were adolescents provides adoptees with a foundation from which they may explore their curiosity and intentions to seek information in emerging adulthood if they so choose. Flexible communication about adoption in the adoptive family offers adoptees an accepting environment in which they may consider their options to seek information or contact with birth family and make decisions about whether or not they wish to do so. Adoptees' adaptive individual adjustment, which may or may not include a search for contact or information, is likely facilitated by flexible, interactive communication with adoptive parents that is focused on adoptees' evolving needs for communication, information, and privacy.

As adoptive parents and their children progress through the phases of adoption-related communication described in the FAC model (Wrobel et al., 2003) they encounter the dialectical expression of openness/closedness in communication in several ways, one of which may be difference in amount of desire to discuss adoption-related issues. Adoptive parents may wish to discuss adoption but their adolescents may not be interested. Adoptive parents may exhibit empathy with and tolerance of their child's feelings about adoption (one of the dimensions of ACO) by being available to discuss adoption while also respecting their child's desire for closedness. In this way, adoptive parents are able to respect their child's boundaries regarding communication. Communication Privacy Management theory helps us understand the dynamic nature of privacy choices and the dialectics inherent in privacy disclosures (Petronio & Caughlin, 2006) for adoptive families across developmental stages.

Communication within adoptive families involves boundary coordination which involves management of the “push and pull of private disclosures” (Petronio & Caughlin, 2006, p. 36) and therefore adjustment of the degree of permeability depending on the developmental demands encountered by family members (Caughlin & Petronio, 2004). Flexible

communication that allows for the “dialectical flux or movement between discourses is central to meaning-making” (Harrigan, in press, p. 5) and thus assists adoptees with the formation of a cohesive sense of self and the ability to feel comfortable with one’s adoptive status (Brodzinsky & Pinderhughes, 2002; McRoy et al., 1990).

Parents’ adoption-related dialogical activity with their children depends on the developmental stages of adoptees and the appropriateness of revealing that information. The balance of openness/closedness and privacy boundaries will therefore shift across FAC phases necessitating flexibility in communication across adoptees’ developmental stages. As adoptees enter adolescence adoptive parents may relax privacy boundaries and create communicative linkages (Caughlin & Petronio, 2004) with their children as they recognize their child’s growing curiosity and respond to questions the child may have. Analyses conducted for this study revealed that adoptive mothers’ ACO scores were positively associated with adoptees’ interest in seeking information in adolescence.

Data were not available on adoptive parents’ ACO ratings when their children were emerging adults; therefore, it was not possible to examine whether ACO in emerging adulthood is associated with information seeking in emerging adulthood. According to the FAC model, however, emerging adulthood is a time when adoptees have begun independently seeking information about their adoptions and birth families and are less reliant on adoptive parents for fulfilling curiosity and information needs.

The majority of emerging adults in the present sample did not live at home and all were older than 18, theoretically allowing them to search independently of their parents if they wished. It is possible that ACO in the adoptive family while adoptees are emerging adults has a less significant impact on information seeking than did ACO while adoptees were adolescents. That is not to say, however, that continued ACO does not contribute to positive individual and family adjustment across the adoptive family life span or that adoptive families cease having many rich opportunities for adoption communicative openness after adoptees have reached emerging adulthood.

Information Seeking Change

Results confirmed that information seeking intentions in adolescence do not remain static over time for the majority of adoptees. For the most part, movement took place across 1 or 2 levels suggesting that change is a relatively gradual process. Tentative steps in either direction on the information seeking spectrum possibly point to adoptees’ awareness of the potentially sensitive nature of information seeking and the choices they make about whether or not to search which likely includes consideration of other individuals in the adoption kinship network on whom those choices will have an impact.

On the other hand, several emerging adults who were actively seeking or had obtained information at Wave 3 indicated in adolescence that they would not seek information in the future. This finding indicates that it is possible for intentions to change quite drastically between adolescence and emerging adulthood, even though the majority of adoptees experience more subtle changes. It is also important to note that a sizable minority of adoptees experienced no change in information seeking intentions between adolescence and emerging adulthood. The information seeking scores represented among those adoptees whose intentions did not change ranged from 1 (will not seek information) to 4 (strong interest). Lack of change in intentions for this group perhaps suggests that they had a clearer sense of their desire or lack of desire and reasons for seeking or not seeking in adolescence than did adoptees whose intentions changed between adolescence and emerging adulthood.

Half of all emerging adults in this sample had taken action on their intentions to seek information obtaining the information or contact they desired. This finding is consistent with previous research that indicates adoptees who choose to search for information about or contact with birth family typically do not do so until emerging adulthood (Howe & Feast, 2001; Wrobel et al., 2004). On the other hand, a significant number of participants made strong statements that they would not seek information or contact at each wave. The decision whether or not to seek information is unique to each adoptee and is likely influenced by multiple individual and family-level factors such as amount of desire for or access to information, level of satisfaction with existing family relationships, concern regarding outcome of a search, cost and time spent, and impact of the search on others in the adoption kinship network, including birth and adoptive family members.

In sum, it is important to reiterate that all information seeking levels, ranging from no intention to seek information to actively seeking (or searched and gained desired information or contact) continued to be represented at Wave 3 as they were at Wave 2, illustrating diversity in desire to seek information in emerging adulthood. Ultimately, the choice whether or not to seek is a highly individualized one and has different ramifications for different adoptees. Two important aspects regarding this individualization should be considered. First, ACO does influence the context in which adoptees make their information seeking decisions. The experience of a more flexible communication style about adoption in the family supports information seeking. Secondly, the intensity of curiosity about unknown information is unique to each individual. Wanting to know how one's birthmother looks can lead one person to an immediate quest and another to a deferred one.

Information Seeking and Gender

Females were more likely to increase their information seeking intentions and seek out new information or contact. It appears that females in this sample had already begun moving toward increased information seeking as adolescents, whereas the majority of adolescent males expressed moderate or no interest in information seeking (Wrobel et al., 2004). As emerging adult adoptees, women continued to endorse greater degrees of information seeking intent and behavior than males.

The results of the current study indicate that adult female adoptees not only are more likely to seek information in emerging adulthood but also experience a greater change in intention to seek information between adolescence and emerging adulthood than men. A more intense desire for unknown information on the part of women is a possible explanation for the gender difference related to information seeking. This difference in intensity may be related to the content of desired information. Future research should consider these possibilities.

Strengths and Limitations

This sample of adoptees is unique because it includes both adoptees who are interested in seeking information about birth family and adoptees who are not. The inclusion of non-seeking adoptees in the present sample therefore contributes to an understudied subsample of the adoptee population (Bertocci & Schechter, 1991). This study is also significant because few other studies follow a group of adoptees and their families across the major transition from adolescence to emerging adulthood. The sample in the present report does not include families with transracial, international, or special needs adoptions for whom information seeking, life cycle events, and adoption communicative openness may be experienced differently due to the complexity added by these types of adoption. Results were limited to domestic adoptees who were voluntarily placed in infancy; generalization beyond this group must be made with caution.

Implications for Family Communication and Practice

Findings of the current study emphasize the importance of recognizing the dynamic nature of adoptee information seeking between adolescence and emerging adulthood. Considering whether to seek information and the subsequent decision to seek or not seek are highly individual activities that may take place several times over the course of an adoptee's lifetime. Information seeking must therefore be conceptualized as an active process rather than a static or singular event. Considering information seeking as a process that occurs over the course of several periods in the life cycle will better enable adoptive families and adoption professionals to provide adoptees with support that is consistent with their developmental stages and their intentions or lack of intentions to seek information. Adoption professionals may support information seeking by placing updates provided by birth family members in adoptees' files and by being ready to facilitate contact if desired by members of the adoption kinship network.

The relationship between adoptee information seeking in emerging adulthood and adoption communicative openness provides information for adoptive parents and adoption professionals about the salience of adoption-related communication in emerging adult adoptees' information seeking processes. This finding coupled with previous theoretical and practical research by Kirk (1964) and Brodzinsky (2005) provide parents and professionals with a better understanding of the degree of communication openness in which parents may engage with their adolescent adoptees in order to support their information seeking processes into emerging adulthood. Adoptive parents lay a foundation of open and flexible communication by observing privacy boundaries and displaying comfort with contradictions that subsequently fosters their children's natural curiosity about birth family early in their children's lives and eventually allows them to make decisions about whether or not to seek information.

References

- Arnett JJ. Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*. 2000; 55:469–480. [PubMed: 10842426]
- Aumend SA, Barrett MC. Self-concept and attitudes toward adoption: A comparison of searching and nonsearching adult adoptees. *Child Welfare*. 1984; 63:251–259. [PubMed: 6723422]
- Baxter LA. Relationships as dialogues. *Personal Relationships*. 2004; 11:1–22.
- Berger C. Strategic and nonstrategic information acquisition. *Human Communication Research*. 2002; 28:287–297.
- Bertocci D, Schechter MD. Adopted adults' perception of their need to search: Implications for clinical practice. *Smith College Studies in Social Work*. 1991; 61:179–196.
- Borders LD, Penny JM, Portnoy F. Adult adoptees and their friends: Current functioning and psychosocial well-being. *Family Relations*. 2000; 49:407–418.
- Brodzinsky, DM. Reconceptualizing openness in adoption: Implications for theory, research, and practice. In: Brodzinsky, DM.; Palacios, J., editors. *Psychological issues in adoption: Research and practice*. Westport, CT: Praeger; 2005. p. 145-166.
- Brodzinsky, DM.; Pinderhughes, E. Parenting and child development in adoptive families. In: Bornstein, MH., editor. *Handbook of parenting: Vol 1 Children and parenting*. 2. Mahwah, NJ: Lawrence Erlbaum Associates; 2002. p. 279-311.
- Browne, MW.; Cudeck, R. Alternative ways of assessing model fit. In: Bollen, KA.; Long, JS., editors. *Testing Structural Equation Models*. Beverly Hills, CA: Sage; 1993. p. 136-162.
- Campbell LH, Silverman PR, Patti PB. Reunions between adoptees and birth parents: The adoptees' experience. *Social Work*. 1991; 36:329–335. [PubMed: 1896888]
- Caughlin, JP.; Petronio, S. Privacy in families. In: Vangelisti, AL., editor. *Handbook of Family Communication*. Mahwah, NJ: Lawrence Erlbaum Associates; 2004. p. 379-412.

- Cohen J. Weighted kappa: Nominal scale agreement with provision for scale disagreement or partial credit. *Psychological Bulletin*. 1968; 70:213–220. [PubMed: 19673146]
- Cubito DS, Obremski Brandon K. Psychological adjustment in adult adoptees: Assessment of distress, depression, and anger. *American Journal of Orthopsychiatry*. 2000; 70:408–413. [PubMed: 10953787]
- Feast J, Howe D. Adopted adults who search for background information and contact with birth relatives. *Adoption & Fostering*. 1997; 21:8–15.
- Gilligan, C. In a different voice: Psychological theory and women's development. Cambridge: Harvard University Press; 1982.
- Grotevant, HD.; McRoy, RG. Openness in adoption: Exploring family connections. Thousand Oaks, CA: Sage; 1998.
- Harrigan MM. The contradictions of identity-work for parents of visibly adopted children. *Journal of Social and Personal Relationships*. in press.
- Howe D, Feast J. The long-term outcome of reunions between adult adopted people and their birth mothers. *British Journal of Social Work*. 2001; 31:351–368.
- Hu L, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*. 1999; 6:1–55.
- Johnson CL. Perspectives on American kinship in the later 1990s. *Journal of Marriage and the Family*. 2000; 62:623–639.
- Kirk, HD. Shared fate. New York: Free Press; 1964.
- Kline, RB. Principles and practice of structural equation modeling. New York: Guilford Press; 2005.
- Kowal KA, Schilling KM. Adoption through the eyes of adult adoptees. *American Journal of Orthopsychiatry*. 1985; 55:354–362. [PubMed: 4025515]
- Landis JR, Koch GG. The measurement of observer agreement for categorical data. *Biometrics*. 1977; 33:159–174. [PubMed: 843571]
- Loewenstein G. The psychology of curiosity: A review and reinterpretation. *Psychological Bulletin*. 1994; 116(1):75–98.
- McDonald RP, Ho MR. Principles and practice in reporting structural equation analyses. *Psychological Methods*. 2002; 7(1):64–82. [PubMed: 11928891]
- McRoy RG, Grotevant HD, Ayers-Lopez S, Furuta A. Adoption revelation and communication issues: Implications for practice. *Families in Society*. 1990; 71:550–557.
- Müller U, Perry B. Adopted persons' search for and contact with their birth parents II: Adoptee-birth parent contact. *Adoption Quarterly*. 2001; 4:5–37.
- Muthén, B.; Muthén, L. Mplus version 5.1. Los Angeles, CA: Muthén & Muthén; 1998–2008.
- Neil E, Grotevant HD, Young J. Adoption communicative openness coding manual v. 4. 2006 Unpublished report available from the authors.
- Pacheco F, Eme R. An outcome study of the reunion between adoptees and biological parents. *Child Welfare*. 1993; 72:53–64.
- Petronio, S.; Caughlin, JP. Communication privacy management theory: Understanding families. In: Braithwaite, DO.; Baxter, LA., editors. *Engaging theories in family communication: Multiple perspectives*. Thousand Oaks, CA: Sage Publications; 2006. p. 35-49.
- Ruble, DN.; Martin, CL. Gender development. In: Damon, W.; Eisenberg, N., editors. *Handbook of child psychology: Vol 3 Social, emotional, and personality development*. 5. New York, NY: Wiley; 1998. p. 933-1016.
- Schafer JL, Graham JW. Missing data: Our view of the state of the art. *Psychological Methods*. 2002; 7:147–177. [PubMed: 12090408]
- Silverstein M, Parrott TM, Bengtson VL. Factors that predispose middle aged sons and daughters to provide social support to older parents. *Journal of Marriage and the Family*. 1995; 57:465–475.
- Sobol MP, Cardiff J. A sociopsychological investigation of adult adoptees' search for birth parents. *Family Relations*. 1983; 32:477–483.
- Wrobel, GM.; Dillon, K. Adopted adolescents: Who and what are they curious about?. In: Wrobel, GM.; Neil, E., editors. *International advances in adoption research for practice*. London: Wiley; 2009. p. 217-244.

- Wrobel GM, Grotevant HG, McRoy RG. Adolescent search for birth parents: Who moves forward? *Journal of Adolescent Research*. 2004; 19:132–151.
- Wrobel GM, Kohler JK, Grotevant HD, McRoy RG. Factors related to patterns of information exchange between adoptive parents and children in mediated adoptions. *Journal of Applied Developmental Psychology*. 1998; 19:641–657.
- Wrobel GM, Kohler JK, Grotevant HD, McRoy RG. The family adoption communication (FAC) model: Identifying pathways of adoption-related communication. *Adoption Quarterly*. 2003; 7:53–84.
- Zamostny KP, Wiley MO, O'Brien KM, Lee RM, Baden AL. Breaking the silence: Advancing knowledge about adoption for counseling psychologists. *The Counseling Psychologist*. 2003; 31:647–650.

FIGURE 1.

Model of Wave 3 (W3) Information Seeking and Adoption Communicative Openness (ACO).

Note: solid lines are significant ($t \geq 1.96$), and dotted lined indicate nonsignificant results ($t < 1.96$).

FIGURE 2.

Model of information seeking change.

Note: Higher Information Seeking difference scores indicate an increase in Information Seeking between Waves 2 and 3. Males are dummy coded “0” and females “1”.

TABLE 1

Information Seeking Difference Scores

Difference Score	N	%
5	2	2.4
4	5	6.1
3	5	6.1
2	18	22.0
1	21	25.6
0	17	15.9
-1	10	15.9
-2	3	3.7
-3	1	1.2
-4	0	1.2
Total	82	100.0

Note: Positive difference scores indicate an increase in Information Seeking between Waves 2 and 3, zero scores indicates no change, and negative scores indicate a decrease.