



# Summary of Wave 4 Methods

## Minnesota/Texas Adoption Research Project

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# Minnesota / Texas Adoption Research Project

## Summary of Methods Used in Wave 4

This document summarizes the sample, procedures, and measures used in Wave 4 (W4) of the Minnesota Texas Adoption Research Project (MTARP). We first describe the sample of adopted young adults (YA), including the reasons for nonparticipation in Wave 4. Next, we describe procedures and measures that were followed. We then describe the sample of birth mother participants (BMo) and the procedures followed and measures they were administered.

### **Young Adult Participants**

All target adopted young adults (YAs) from the original 190 families recruited into MTARP at Wave 1 were invited to participate, with the exception of one young adult, who was known to be deceased. W4 data collection occurred between 2012 and 2014.

#### Adopted Young Adult Participants

The W4 sample included 112 young adults (n = 50 males, 62 females; ages 26.29 – 37.51; M = 31.43 years). Complete data on all W4 measures were received from 103 YAs; partial data were received from 9 additional participants.

Extensive efforts were made to contact all eligible participants, who were contacted via email and a hardcopy letter to gauge interest in participating in the survey and to explain the compensation protocol. If participants could not be found through either of these methods of contact, then their adoptive parents were contacted to see if the YA could be located. Various internet search engines and social media connections were also used to locate YAs. In comparison to the possible sample of 190 young adults whose families began in the study at Wave 1, 112 participated at W4, 6 declined to participate, 1 was deceased, and 71 others did not participate because they could not be located with certainty or they were located but never responded despite multiple attempts.

Race / ethnicity of the participating YAs included White / Caucasian (n = 111, 99.1%), and Black / African American (n = 1, 0.9%). In terms of highest level of education attained, 32 (28.6%) had undertaken graduate work or had advanced degrees, 36 (32.1%) had completed a 4-year college degree, 43 (38.4%) had some education or training beyond high school, and 1 (0.9%) had completed high school. Some (16.1%) were still attending school full or part time. The majority of YAs (n = 83, 74.1%) were working full time, and 95 (84.8%) worked at least 10 hours per week. Four YAs (3.6%) had served in the military. Most YAs were currently in a committed relationship (n=86, 76.8%), and 46 (41.1%) had at least one child (range: 1 – 5 children; total of 90 children).

Analyses were conducted to examine whether differential attrition had occurred between Waves 3 and 4. Young adults who did and did not participate at Wave 4 were compared on the following W3 variables: participant's age at W3, gender, years of education attained at W3, level of current contact with birth mother, and satisfaction with current contact with birth mother. No significant differences were found for age of participants. Males were more likely than females to drop out at W4:  $\chi^2(1)=5.80$ ,  $p=0.016$ . There was a significant difference between the 2 groups in the number of years of education:  $t(157)=4.61$ ,  $p < 0.01$ . Those who dropped out at W4 had significantly fewer years of education (difference = 1.65 years) than those who participated in both waves. With regard to level of current contact, the retention of people who had different levels of current contact with their birth mother was not proportional across those who participated vs. dropped out:  $\chi^2(3)=9.34$ ,  $p=0.025$ . Specifically, those who have current birth mother contact with meetings were less likely to drop out than those who had contact without meetings, those whose contact had stopped, and those who never had contact. There were no significant difference between those who participated at W4 vs. dropped out in satisfaction of current contact with birth mother.

## Procedures

### Adopted Young Adult Procedures

The adopted young adults completed the survey online. Each participant was assigned a unique link by Qualtrics, an online survey software, to access the consent form, instructions on how to navigate the survey, and the survey itself. After consenting to participate in the study, participants received an email in their preferred email account, which contained a link to the survey. The survey consisted of 11 Parts for those participants without children, and 13 Parts for those participants who indicated that they did have children. All participants were notified that the preferred timeframe for completing the survey (once they had started it) was one week. The majority of participants completed their surveys on the day they started. After completing the survey, participants were sent a thank you email, which also contained a reminder about compensation. If participants did not complete their surveys within the given timeframe of one week, they were sent reminder emails through the Qualtrics website. The young adults were compensated \$50 for completion of the survey and entered into a drawing for an iPad. A few of the adopted young adults ( $n = 5$ ) completed surveys in hardcopy paper format for reasons such as lack of internet access, discomfort communicating in an electronic format and lack of time.

## Measures

### Adopted Young Adult Measures

Young Adult Survey. The adoptees completed a survey that contained 13 Parts in total, examining topics such as demographics, emerging adulthood, adoption dynamics, adoptive identity, contact arrangements with birth relatives, important life events, psychological health, physical and emotional health, experiences in relationships, and

parenting. Adoption-related questions covered topics such as contact with birth family, information seeking, adoptive identity, satisfaction with contact arrangements, and emotions and feelings related to various adoptive and birth relatives.

The 13 Part YA survey was administered in the following order:

1. Demographics (living arrangements, education, employment, community / civic service, family, relationships, children, health, religion)
2. Inventory of Dimensions of Emerging Adulthood
3. Adoption Dynamics Questionnaire (30 item version – see description that follows)
4. Adoptive Identity Questionnaire  
Questions about microaggressions
5. Adoption Openness / Contact questions about birth mother, birth father, and birth siblings
6. Adoption-related Feelings (about birth mother, birth father, birth siblings, adoptive mother, adoptive father, and self)
7. Balancing Your Life Questionnaire  
Life Events
8. Ryff Scales of Psychological Well Being
9. Brief Symptom Inventory
10. Experiences in Close Relationships
11. Network of Relationships Inventory
12. Child Adaptive Behavior Inventory – only for participants with children
13. Parenting Stress Index – only for participants with children

**Demographic Questionnaire.** The young adult demographic questionnaire included sections about living arrangements, education, employment, civic engagement, family information, relationships with others, parenting, health, and religion. Information regarding the highest level of education completed was requested as well as detailed information about the most recent paid employment of the YA. The specific information regarding job history included the name of employer, the position and type of work, whether it was full-time, part-time or seasonal, the length of employment, satisfaction with employment, and if the current job matched future career goals. The demographic questionnaire included questions about living arrangements, education, employment, community service / civic engagement, relationships with parents, committed relationship partners, children, health, and religion.

The section in the demographic questionnaire on committed relationship partners includes the 7-item Relationship Assessment Scale, which assesses relationship satisfaction.

**Inventory of Dimensions of Emerging Adulthood (IDEA).** The IDEA (Arnett, Reifman, & Colwell, 2003) was developed for use with the population of individuals 18 -25 years old who are in a developmental time of transition to adulthood called Emerging Adulthood. Emerging Adulthood is a time between adolescence and full-fledged

adulthood. It is viewed as a time to explore a variety of possible life directions in love, work, and worldview. IDEA respondents are asked to think about their life at the current moment, including a few years before and after. The survey then presents the stem question: “Is this period of your life a...” followed by 31 phrases such as “time of many possibilities,” a “time of exploration?” Respondents are asked to make selections on a scale as follows: 1= “strongly disagree,” 2= “somewhat disagree,” 3= “somewhat agree” and 4= “strongly agree.” Alphas for MTARP data at this wave are as follows: Identity exploration ( $\alpha = .85$ , 7 items), Experimentation/possibilities ( $\alpha = .78$ , 5 items); Negativity/instability ( $\alpha = .85$ , 7 items); Other focused ( $\alpha = .72$ , 3 items); Self-focused ( $\alpha = .72$ , 6 items); and Feeling in-between ( $\alpha = .80$ , 3 items).

Adoption Dynamics Questionnaire. The Adoption Dynamics Questionnaire (Benson, Sharma & Roehlkepartain, 1994) assesses adoptees’ positive affect about adoption, preoccupation with their adoption, and negative experiences with adoption. Two modifications were made to the original questionnaire, one question was dropped (Would you like to meet your birthparents to find out what they look like?), and another question was added (How about often do you have dreams at night about meeting or living with your birthmother/father?—not relevant for W4).

At Wave 4, the majority of “preoccupation with own adoption history” questions were omitted, leaving only three questions that tapped into that particular subscale (“How often do you think about your birthmother?”, “How often do you think about your birthfather?”, “How often do you think about adoption?”). Possible responses to questions of the Adoption Dynamics Questionnaire include rating answers on a five-point Likert scale from 1 = “not true or strongly disagree or never” to 5 = “always true or strongly agree or always”; choosing between 7 levels of frequency ranging from “never” to “everyday”; and marking “no”, “not sure” or “yes”. The 30 items that were chosen to be included in this wave’s questionnaire form three scales that assess positive affect about own adoption (PA,  $\alpha = .91$ , 20 items), preoccupation with own adoption history (PRE,  $\alpha = .74$ , 3 items), and negative experience with own adoption (NE,  $\alpha = .59$ , 7 items).

Adoptive Identity. The Adoptive Identity questions were adapted for use in the MTARP 4 survey from Richard Lee’s (2007) Adoptive Identity Scale, which was based on Jean Phinney’s Multiethnic Ethnic Identity Measure (MEIM) (1992). Lee (2007) also adapted a few items for the Adoptive Identity Scale from the Multidimensional Inventory of Black Identity (MIBI) from Robert Sellers (1997). Additionally, two new items were developed and added into the Adoptive Identity Scale including “Other adoptees embarrass me” and “I identify as an adoptee”. After a factor analysis was conducted, the Adoptive Identity measure was found to assess adoptive identity as a single factor structure. The measure includes 14 items that are rated on a Likert scale from 1 = “strongly disagree” to 5 = “strongly agree”, where higher scores are indicative of a more positive identity. The internal consistency reliability for the Adoptive Identity measure at Wave 4 was good ( $\alpha = .84$ ). The adoptive identity questions are followed by several items relating to YAs’ experiences of adoption-related microaggressions, formulated by Karin Garber. These items are not scored as part of the adoptive identity scale.

Adoption Openness / Contact. The Adoption Openness questions were developed specifically for use in the MTARP 4 survey (Grotevant & Wrobel, 2011). The Adoption Openness questions were based on the interview protocol used to assess openness in adoption in earlier waves of the MTARP project. These survey questions gather information about YAs' contact arrangements with their birth relatives, the current frequency and type of contact with birth relatives, YAs satisfaction with current contact arrangements, resources the YAs may use to come into contact with their birth relatives, and specific information the YA would like to know about their birth relatives. Some items are rated on a Likert scale, such as questions concerning satisfaction about adoption arrangements, while other items can have multiple answers such as questions asking about what elements an adoptive person may be curious about concerning a birth relative.

Feelings about Adoption Questionnaire. Feelings About Adoption was also created for use in the MTARP 4 survey (Grotevant & Wrobel, 2011). These questions were based on earlier interview protocol used to assess the target child's thoughts and feelings about relationships with birth and adoptive relatives in earlier waves of the MTARP project. These survey questions assess the adoptee's satisfaction with current contact arrangements with birth relatives, and feelings the YA has about relationships with his/her birth mother, birth father, birth siblings, adoptive mother, and adoptive father. Lastly, the Feelings about Adoption Questionnaire examines the YAs perception of how adoptive relatives feel about the YAs current contact arrangements with birth relatives. The measure includes items that are rated on a Likert scale from 1 = "strongly disagree" to 5 = "strongly agree", where higher scores are indicative of a more positive view of openness in relationships with different birth and adoptive relatives.

Balancing Your Life Questionnaire. This survey was adapted from Stephen Marks' work on role balance; used in the 32 year assessment of the MN Longitudinal Study of Children and Families (Sroufe, Egeland, Collins, et al.) It includes 18 items: 4 assess role balance, 6 assess role ease, and 8 assess role overload.

Life Events. Life Events is a 37-item inventory of major events in the young adult's life over the past 12 months. Respondents are asked whether each identified major event Did Not Occur; Yes-Did Occur (to you or someone important to you) but was not very stressful to you; Yes-Did occur (to you or someone important to you) and was somewhat stressful to you; and Yes-Did occur (to you or someone important to you) and was extremely stressful to you. Example events include experiencing unemployment, trouble with relatives, drug use, being a victim of crime, and going into debt. It is important to note that the event could have occurred to the respondent or to someone important to them, but the response asked how stressful it was to the respondent him/herself.

Ryff Scales of Psychological Well-Being. The Ryff Scales of Psychological Well-Being (Ryff, 1989) medium form contains 9-item scales totaling 54 self-report items. The instrument is used to assess various facets of psychological well-being including intrapersonal dynamics and social and emotional health. Six main areas of psychological "well-being" are measured: autonomy, environmental mastery, personal growth, positive

relations with others, purpose in life, and self-acceptance. Each question was measured on a 6-point Likert scale from 1 = “strongly disagree” to 6 = “strongly agree” with higher scores related to stronger agreement and lower scores related to stronger disagreement; it should be mentioned there are no specific cut-off points as specified by the creators of the measure for defining “high” or “low” well-being. Methods used to assess high and low well-being were computed based on the sample in question, as per the Ryff scoring guidelines. Questions that required reverse scoring were completed after responses were collected. Internal consistency reliability for each of the six areas was found to be good with alphas between .86-.91 as determined in Srimathi and Kumar’s (2010) study that used the medium form of the Ryff Scales. For Wave 4 of MTARP data collection, these subscales had alphas between 0.72-0.89.

Brief Symptom Inventory. The Brief Symptom Inventory (BSI; Derogatis, 1993) is a 53-item self-report measure designed to tap into a “snapshot” of current psychological symptoms across clinical and nonclinical populations. Nine primary symptom dimensions are assessed: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Three global indices are also incorporated into the measure, including a global severity index, positive symptom total, and positive symptom distress index. The BSI is easy to administer, requires a 6<sup>th</sup> grade reading level, and is appropriate for participants aged 13 and older. It has been employed across a variety of research settings and populations, and has demonstrated good reliability and validity. For this wave of the study, normalized mean global severity index was 51.02 ( $SD = 14.25$ , range = 30-80), normalized mean positive symptom total was 52.48 ( $SD = 11.58$ , range = 34-80), and normalized mean positive symptom distress index was 49.84 ( $SD = 12.24$ , range = 22-80).

Experience in Close Relationships. Experience in Close Relationships (ECR) (Brennan, Clark, & Shaver, 1998) is a 36-item, self-report measure of adult romantic attachment style. Participants respond about relationships in general rather than about a specific or current relationship. The ECR measures two dimensions of attachment—*anxiety* and *avoidance*—with 18 questions assessing each dimension. Items on the Avoidance scale of the ECR include statements such as “I prefer not to show a partner how I feel deep down” and “I want to get close to my partner, but I keep pulling back”; items on the Anxiety scale include “I worry about being abandoned” and “When I’m not involved in a relationship, I feel somewhat anxious and insecure”. All items are rated by the participant using a 7 point Likert-type scale ranging from 1 = “disagree strongly” to 7 = “agree strongly”. Scoring of the ECR involves recoding reverse variables for items 3, 15, 19, 22, 25, 27, 29, 31, 33, and 35. Each scale is averaged resulting in a possible scale score between 1 and 7. Higher scores indicate greater levels of Anxiety and Avoidance. Reliability coefficients for each scale in the current wave’s MTARP sample are high (“Avoidant”  $\alpha = 0.95$ , “Anxious”  $\alpha = 0.94$ ).

Network of Relationships Inventory. The Network of Relationship Inventory (Furman & Buhrmester, 1985) is made up of 45 questions that comprise 15 subscales that measure characteristics of close relationships. The subscales include: companionship, conflict,

instrumental aid, antagonism, intimacy, nurturance, affection, admiration, relative power, reliable alliance, support, criticism, dominance, satisfaction, and punishment. For this study, the three items of the punishment scale were omitted. Each question was measured on a five point Likert scale ranging from 1 = “little or none” to 5 = “the most”. The NRI assesses these relationship characteristics across different types of close relationships including platonic, romantic, and familial relationships. The Minnesota Texas Adoption Research Project utilized the NRI to evaluate perceptions of the relationship between the target adopted young adult and the person that he/she identified in the survey as their closest relationship partner. There are 14 subscales with three items each. Eight subscales are combined to create a social support scale; four are combined to create a negative interaction scale. The remaining two subscales, satisfaction and relative power, are not combined with other subscales. The reliabilities for YA data in MTARP were as follows: social support ( $\alpha = .92$ ); negative interaction ( $\alpha = .83$ ); satisfaction ( $\alpha = .95$ ); and relative power ( $\alpha = .83$ ).

Child Adaptive Behavior Inventory (CABI). The CABI (Miller, 1987) is a 91-item questionnaire that each YA completed if he/she reported having children. Since the measure is child-specific, participants were instructed to respond concerning the oldest child they were parenting who is age 12 or younger. If they were only parenting children over the age of 12, they were instructed to skip the measure. The CABI is organized in terms of 20 scales. Factor analyses of the 20 scales were conducted, and four summary scales emerged: poor emotional control (alpha = 0.93; hyperactive, antisocial, negative engagement, hostile, tension, fairness (reverse scored), calm response (reverse scored), and kindness (reverse scored)); social isolation (alpha = 0.84; apathy, introversion, depression, victim, extraversion (reverse scored)); symptoms (alpha = 0.71: somatic symptoms, imitates, physical symptoms); and intellectual engagement (alpha = 0.86; intelligence, creativity, task orientation, distractibility (reverse scored)). Higher scores indicate higher levels of the quality indicated by the scale name.

Parenting Stress Index (PSI). The PSI (Abidin, 1986) is a self-report questionnaire administered to the YAs with children. Since the measure is child-specific, participants were instructed to respond concerning the oldest child they were parenting who is age 12 or younger. If they were only parenting children over the age of 12, they were instructed to skip the measure. Scales focus on aspects of the child, the parent, and their context that might contribute to parenting stress. The measure has been normed on both clinical and non-clinical samples of parents. Scales are grouped into two main domains—the Child Domain and the Parent Domain. In this study, as at Wave 1, all subscales from the Child Domain and the Parent Domain were used—Distractibility (C), Reinforces Parent (C), Mood (C), Acceptability (C), Adaptability (C), Demandingness (C), Competence (P), Attachment (P), Role Restriction (P), Depression (P), Relationship With Spouse (P), Isolation (P), and Health (P). Four of the Child Domain scales (Reinforces Parent, Acceptability, Adaptability, and Demandingness) were combined to provide a measure of incompatibility in the relationship between child and parent; the Incompatibility scale was created by summing these four subscales, where a higher score indicates greater incompatibility between child and parent. Alpha reliabilities on the Child Domain subscales ranged from 0.63 (Child Reinforces Parent) to 0.80 (Adaptability), and the

alpha reliabilities on the Parent Domain subscales ranged from 0.48 (Attachment) to 0.85 (Depression). The PSI was administered to adoptive parents in previous waves.

### **Birth Mother Participants**

All 169 birth mothers who participated in the original MTARP study at Wave 1 (W1) were re-contacted in 2003 and again in 2009 to assess their willingness to participate in a Wave 4 (W4) round of data collection. At that time, 81 birthmothers provided a brief update on their adoption arrangements and indicated their willingness to be re-contacted about future participation. When W4 began in 2012, 72 of these birthmothers could be located and were invited to participate again. W4 data collection occurred between 2012 and 2016.

The W4 sample included 39 birth mothers ( $M = 50.36$  years;  $SD=4.14$ ) who provided complete data on all W4 measures. Approximately 68% of birthmothers who completed the demographic survey reported being married; 76% had at least one parented child. Twenty-four BMOs were employed full-time and about 62% had received a bachelor's degree or higher. Twenty-six of the birthmothers were in current contact with their placed child, and for 15 of those birth mothers the contact has been continuous since placement.

### **Birth Mother Procedures**

Survey. Participants were contacted via email and a hardcopy letter to gauge their interest in participating in the survey. If participants could not be found through either of these methods of contact, then their participating birth children, who were in current contact with their birth mothers, were asked to forward a study invitation to them. After consenting to participate in the study, participants received an email in their preferred email account, which contained a survey link. Each participant was assigned a unique link by Qualtrics, an online survey software, to access the consent form, instructions on how to navigate the survey, and the survey itself.

After completing the survey, participants were sent a thank you email. If participants did not complete their surveys within the given timeframe of one week, they were sent reminder emails through the Qualtrics website. Thirty-six of the birth mothers completed the survey online, while 3 birth mothers completed surveys in hardcopy paper format for reasons such as lack of Internet access and lack of time to remain online.

Interview. The birth mothers who indicated that they had identifying information about the child they placed for adoption and were either in direct contact with this adopted young adult or were following the adopted young adult through various forms of social media (such as Facebook) were invited to participate in a follow-up interview. Of the 39 birth mothers who completed a survey, 30 met the criteria for an invitation, and 26 birth mothers completed an interview.

### **Birth Mother Measures**

Birth Mother Survey. The birth mothers completed a survey that contained seven parts in total, generally examining themes such as: 1) demographics; 2) openness arrangement and changes over time; 3) feelings about the adoption plan; 4) current role; and 5) agency contact.

The 7 Part BMO survey was administered in the following order:

1. Demographics (living arrangements, education, employment, family, relationships, children, religion)
2. Information gathering and contact with YA
3. Openness among those involved with the adoption
4. Relationship between YA and others in the birth family
5. Feelings about the adoption plan
6. Current birth mother role
7. Agency contact

Demographic Questionnaire. The birth mother demographic questionnaire included sections about living arrangements, education, employment, income, family information, relationships with others, parenting, and religion. Information regarding the highest level of education completed was requested as well as detailed information about the most recent paid employment of the birth mother.

Birth Mother Interview. The birth mother interview was administered separately. The semi-structured interviews were an extension of the birth mother survey and allowed for more in-depth responses, related to the topics of the survey. These topics included information-gathering and contact with the adopted young adult, openness among those involved with the adoption, relationship between their adult birth child and others in the birth family, feelings about the adoption plan, current birth mother role, and agency contact. There was also a section exploring the role technology played in communication and information-gathering, with a set of questions related to social media use.