

**PREDICTORS OF A YOUNG WOMAN'S PREGNANCY DECISION:**

**APPLICATION OF THE THEORY OF PLANNED BEHAVIOR**

by

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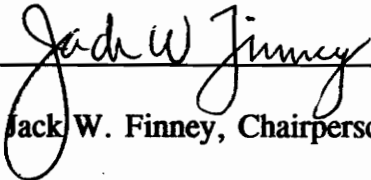
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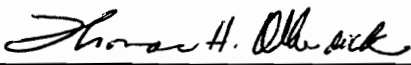
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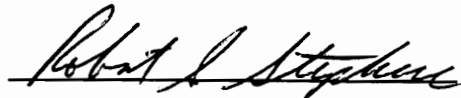
**Psychology**

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(ABSTRACT)

The present study evaluated the applicability of the theory of planned behavior (TRP, Ajzen, 1988; Ajzen and Fishbein) to the prediction and understanding of a young woman's intentions to raise or place her child for adoption. During a woman's second and third trimester of pregnancy self-report measures were administered assessing a woman's intentions, attitudes, subjective norms, and perceived behavioral control about both pregnancy resolution choices (i.e., raising or placing a child for adoption). Participants were 52 caucasian women (26 who placed; 26 who raised) ranging in age from 15-32 ( $M = 19$ ). In most respects the findings supported the TPB. However, subjective norms did not significantly enter the regression model in predicting behavioral intentions due to the multicollinearity between it and attitudes. Consequently, subjective norms was replaced by its salient measure of normative beliefs in another regression model. This hierarchial regression analyses revealed that attitudes, normative beliefs, perceived behavioral control and age significantly predicted a woman's intention to raise or place her child. A logistic regression revealed that behavioral intention was the single

best predictor for the final pregnancy resolution behavior, suggesting that it successfully mediated the influences of all other variables studied. Further analysis revealed that women who placed versus those who raised their children differed on a number of behavioral beliefs, outcome evaluations, normative beliefs, and control beliefs.

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## Predictors of a Young Woman's Pregnancy Decision:

### Application of the Theory of Planned Behavior

Adoption has been practiced in various forms throughout recorded history. Ancient laws and texts (e.g., Hammurabi code, the Napoleonic Code, Old and New Testament) provided formal guidelines for adoption practice and examples of adoptive figures (e.g., Moses, Oedipus, Hercules, etc.). In the past, adoption was primarily used for the childless couple's benefit (i.e., to secure heirs, meeting religious needs, satisfy political requirements, secure additional labor for the family) (Brodzinsky, 1987; Kadushin, 1980; Mech, 1973). With the beginning of the industrial revolution attention began to slowly shift towards the needs and welfare of the homeless child (Presser, 1972). Even so, the child welfare system was still in its infancy and was unable to provide adequate permanent placement for children, especially older children (Brodzinsky & Schechter, 1990). During this time the focus of welfare and adoption agencies was still on providing a healthy child for infertile couples, oftentimes forgetting about the well-being and care of the adopted child (Brodzinsky & Schechter, 1990). In 1968 the Child Welfare League of America forced the adoption system to reevaluate how it performed adoptions. Consequently, an adoptee's emotional and physical well-being were then considered first priority over the needs of a childless couple (Brodzinsky, Schechter, & Braff-Brodzinsky, 1986).

The adoption process can be a complex, emotional, rewarding, and often

confusing arrangement that is made between three sets of individuals: adoptee, birthparents, and adoptive parents. The recent rise in unplanned pregnancies and the increasing controversy over abortion has moved adoption to the forefront of the public's attention as a viable option for young mothers with an unplanned pregnancy. On the surface, adoption may appear to be the best, and perhaps easiest, alternative for all parties because the child is provided with a stable home, the adoptive couple is provided with a child, and the birthmother is relieved of an awesome financial and social responsibility. However, the low numbers of actual adoptions indicate that it is an alternative infrequently used.

#### Statistical Rates of Adoption

There are approximately 1,000,000 unmarried women who become pregnant in the United States annually (National Committee for Adoption, 1989). About 40% of these pregnancies are terminated by abortion, and of those that result in a live birth, less than 10% result in adoption placement and of that 10% less than 5% are unrelated adoptions (National Committee for Adoption, 1989). During the 1980's the overall birthrate remained stable for unmarried teens; however, the proportion of unmarried teens raising their children since that time has significantly increased (Farber, 1980). Concurrently, the rate of adoption placement has dramatically reduced as an option for pregnant teenagers. In the 1950's and 60's more than 9% of unmarried pregnant teens relinquished their children for adoption. In the mid to late 70's that figure had dropped to 4% and 2%

between 1982 and 1985 (Bachrach, Stolley, & London, 1992). The most current figures available from a national survey of data for 1986 and 1987 reveal there are approximately 25,000 unrelated infant adoptions per year in the United States (National Committee for Adoption, 1989). Therefore, about 2.5% of unmarried mothers elect to place a child for adoption (Bachrach et al., 1992; National Committee for Adoption, 1989).

Interestingly, when the race of the mother is taken into consideration the sharp decrease in relinquishment is more pronounced in whites than African-Americans (Bachrach et al., 1992). White unmarried teenage women relinquished their children 19% of the time before 1973 compared to 8% between 1973 and 1981. Whereas African-American women relinquished fewer than 2% prior to 1973, and that figure has remained unchanged since that time (Bachrach et al., 1992). It is important to note that the above figures reflect non-related adoptions. Researchers have suggested that the low number of relinquishment rates for African-American women may be attributable to a higher incidence of informal or related adoptions whereby the child is absorbed into the extended family (National Committee for Adoption, 1989; Sandven & Resnick, 1990). However, a number of methodological problems have been encountered when race differences have been looked at in terms of adoption. Kalmuss (1992) has suggested that simple comparison between white and African-American adoption rates may not be legitimate for several reasons. First, African-American infants may be in a higher risk group for psychological and physical problems (Kalmuss, 1992). Second, white and African-

American infants may be placed through different types of adoption systems. For example, white infants may be more likely to be placed through a private agency whereas African-American infants may be placed through a public social service agency (Kalmuss, 1992). Finally, the whole process of placing a child for adoption may be biased towards placing white infants. Different procedures in identifying suitable African-American families may need to be employed before a legitimate comparison can be made between African-American and white infant adoption rates (Kalmuss, 1992).

#### Reasons For Decline In Adoption

Researchers have attributed the decline in adoption to the accessibility of abortion, fewer social sanctions against single motherhood, entitlement programs for mothers and children, and the inflexibility on the part of adoption agencies to move away from a "closed" system (characterized by secrecy and sealed records) of adoption to a more inclusive "open" system (Barth, 1987; Mech, 1986). When open adoption was first introduced it was seen as a way of increasing adoption as an option, while humanizing the process for birth mothers. However, the implementation of open adoption has not been systematic. Open adoption is practiced in many different forms that range from having the birthmother choose the adoptive parents, to an ongoing relationship with birthmother, adopted child, and adoptive parents. The ambiguity in the practice of "open" adoption and the charged atmosphere of the news media has led to the misrepresentation of birthmothers as selfish and intrusive. In fact, birthmothers are often shunned and

feared by adoptive parents and agencies after the adoption has been finalized even if the adoption plan was "open" to ongoing contact with the adopted child (Lifton, September, 1993).

### Psychological/Developmental Differences

Earlier studies have concluded that unmarried teen mothers who choose to keep their children are more emotionally unstable than the unmarried teen mothers who place for adoption (Cattel, 1954; Levy, 1955; Vincient, 1960). According to Resnick (1984) many of these earlier studies were based on outdated societal norms. For example, today unmarried teens have many more services available to them for financial, emotional and educational support. Moreover, societal attitudes have become more accepting of single parenthood, reducing the stress that unmarried women with a child were placed under in the past. However, a more recent study has further perpetuated the conception that women who choose to parent are more unstable psychologically. Horn & Turner (1976) found that unmarried women who raise their children are more likely to have an "unhealthy" profile on the Minnesota Multiphasic Personality Inventory (MMPI) as opposed to unmarried women who relinquish their children. Moreover, Leynes (1980) found that unmarried women who decided to raise their child were more likely to be immature and poorly functioning psychologically. On the other hand, Jacokes (1965) reported no psychological difference on the MMPI between teens who place their babies and those who raise them on their own. Grow (1979) also did not find any differences

in mental functioning between those who parent and those who place their children. The discrepant findings among researchers could be attributable to the lack of consistency of psychological measures, different demographics of the population (e.g., age and race) and subjects used from different times in history.

Resnick (1984) reports that most researchers have ignored the effects of an individual's growing cognitive awareness and its effects on a young woman's pregnancy-resolution decision. Adolescents advance in their cognitive development at various rates, therefore, it is logical to look at measures that would examine their cognitive level at the time of their pregnancy-resolution decision to see the effect that this may have on the final outcome. One measure of cognitive development is a teen's ability and/or inability to abstract consequences into the future. For example, a young adolescent (13-15 years old) may/may not be able to understand the seriousness and consequences involved in raising a child (Swigar, Breslin, Pouzzner, Quinlan, & Blum, 1976). Young pregnant adolescents tend to perceive the benefits of pregnancy as it relates to their life presently, without considering the consequences it has on the baby's life and their future goals (Franklin, 1988). Older adolescents (16 and older) that are more cognitively developed have their own life goals and are able to understand the consequences of raising a baby and its impact of those goals. Consequently, they may be more likely to consider an adoption plan as a better solution for the child and themselves (Cervera, 1993; Resnick, 1990).



Additionally, researchers have suggested that unmarried pregnant teens' decisions to raise their children may result from a lack of opportunity to discuss and/or weigh their options in making a plan for their baby (Cervera, 1993). Studies have shown that some adoption agencies, social caseworkers, and pregnancy counselors may be reluctant to discuss adoption as a viable option for the mothers (Barth, 1987; Mech, 1986). This may implicitly reinforce the teen's decision to raise the child (Cervera, 1993). Moreover, when counseling is done with the unmarried mother to deliberate over the advantages and disadvantages of raising or placing a child, the unmarried mother is more likely to consider adoption (Cervera, 1993; McLaughlin, 1989).

### Descriptive Differences

Few studies have attempted to discover the variables most influential in a woman's decision to place a child for adoption. Thus far the emphasis has been on descriptive and/or characteristic differences between the two groups based on retrospective data. Some of these characterizations include the following: Unmarried women who choose to keep their babies are more likely to be African American women (Namerow, Kalmuss, & Cushman, 1993; Weinman, Robinson, Simmons, Schreiber, & Stafford, 1988), to be younger in age (Grow, 1979; McLaughlin, Pearce, Manninen, & Wings, 1988; Namerow et al., 1993; Weinman et al., 1988), to be receiving government assistance in the form of Medicaid or welfare and have a lower household income (McLaughlin et al., 1988; Namerow et al., 1993; Resnick, Blum, Bose, Smith, & Toogood, 1990; Weinman

et al., 1988), and are more likely to be married sooner and become pregnant faster (although the second child is usually aborted) (McLaughlin et al., 1988). Those who place their children receive more vocational training, aspire to higher levels of education, and are on age appropriate grade levels (Grow, 1984; McLaughlin et al., 1988; Namerow et al., 1993; Resnick et al., 1990; Weinman et al., 1988). Overall, those who relinquish their children have less support from their immediate and extended family in the birth preparation and are more likely to seek prenatal care late in their pregnancy (Namerow et al., 1993; Weinman et al., 1988). Moreover, young pregnant women who had some level of contact with the adoption process (e.g., lived in a maternity home where adoption was discussed or had a family member place a child for adoption, were adopted themselves) were more likely to relinquish their child (Namerow, et al., 1993; Resnick, et al., 1990).

### Multivariate Techniques

Although many demographic differences (i.e., socio-economic status, age, race, etc.) exist between these two groups of young pregnant women, few studies have attempted to use a multivariate technique to find predictors of the pregnancy-decision process. A recent prospective study by Namerow et al. (1993) provided both descriptive comparisons between women who place and women who raise their children and multivariate analyses on variables that have been found to differentiate the groups. They found three significant determinants of a young woman's pregnancy resolution choice.

The strongest predictor revealed that significant others (i.e., mother and boyfriend) played a vital role in a young woman's decision. Young women whose mothers, boyfriends and/or other close relatives wanted them to place were much more likely to place than women whose relatives did not support adoption. A second determinant was prior adoption knowledge and/or exposure. Young women who knew of or were around other women where adoption was discussed (e.g., maternity home) were more likely to place than women who had no prior personal knowledge or exposure to adoption. The final significant predictor found was a woman's attitude towards adoption and/or parenthood, which greatly affected her pregnancy-resolution choice. Young women who perceived that there were more positive outcomes to adoption were more likely to place. Conversely, young women who perceived that there were more positive outcomes for parenting chose to raise their child.

The impact of the family on the decision making process for pregnant teens is widely reported by researchers (Cervera, 1993). Each family structure has a different coping responses to problem-solving the dilemma of a pregnant teen (Abel, Jackson, Fern, Al-Saagarf, & Shuster, 1982; Cervera, 1993). Unmarried mothers who decide to raise their babies are usually offered emotional and financial support from their family (Abel et al., 1982; Geber & Resnick, 1988; Grow, 1980; Namerow et al., 1993). Consequently, the anticipation of family assistance may influence her decision to raise the child rather than place for adoption (Cervera, 1991). Overall, significant others, family

members, and/or the baby's father may actively influence the pregnant teen's decision (Cervera, 1991). Specifically, the pregnant teen's mother has the most influence and power in this decision-making and child-rearing process (Furstenberg, 1980; McLaughlin, 1989; Namerow et al., 1993).

### Theory of Reasoned Action (TRA)

Ajzen and Fishbein (1980) have proposed a model that aids in understanding a variety of social and private behaviors. According to their theory, behavior is determined by the intention to perform a particular behavior and the sociopsychological determinants of a behavioral intention. The TRA assumes that intentions are the immediate determinants of behavior and when measured appropriately, the most accurate predictor (Ajzen & Fishbein, 1980). An intention is accurate in predicting a particular behavior when it is measured at the same level of specificity to the behavior, remains stable over time, and is under the actor's volitional control. Ajzen and Fishbein (1980) purport that the most important factor in determining the strength of the intention-behavior relationship is the degree in which intention is measured at the same level of specificity to the behavior (Ajzen and Fishbein, 1980). The specificity of the intention to the behavior can vary in terms of action, target, context, and time. Ideally, all four levels of specificity should correspond highly from the intention measure to the actual circumstance surrounding the behavior measured (Ajzen and Fishbein, 1980). For example, "I intend to buy (action) an American made car (target) during the Fall 1994 close out sale (context

and time)." The stability of the intention can easily be controlled by allowing for a short interval between the administration of the questionnaire and the observation of the predicted behavior. Generally, speaking the longer the time interval, the less accurate the prediction of the behavior from the intention (Ajzen and Fishbein, 1980). Finally, behaviors that are not under volitional control may result in a weak intention-behavior relationship. Ajzen (1988) has revised the model to include a variable that addresses this issue which will later be discussed.

There are two factors that determine behavioral intentions: personal attitudes towards the behavior and the subjective norms (i.e., social or normative factors) that influence the performance of the behavior. The first component (direct measure of attitudes) is proposed to be a general evaluation of the overall feeling of favorableness or unfavorableness toward the behavior in question (Ajzen and Fishbein, 1980). Attitudes are a hypothetical construct that are inaccessible to direct observation and must therefore be inferred from measurable responses. Although formal definitions of attitudes vary, most social psychologists agree that the most characteristic attribute of attitudes are their evaluative nature towards a behavior, person, self, and/or object (Ajzen, 1988; Fishbein & Ajzen, 1975). To assess a person's attitude toward a behavior a semantic differential rating scale can be used. Semantic differentials are bipolar evaluative adjective scales, such as "good-bad", "pleasant-unpleasant", "harmful-beneficial", etc. (Osgood, Suci, and Tannenbaum, 1957). An overall average of all the semantic differentials measured can

be derived resulting in a single score of a person's general evaluation toward the behavior in question.

The second component (direct measure of subjective norms) refers to a person's perception that most people important to him/her think he/she should perform the behavior in question (Ajzen and Fishbein, 1980). In this particular theory subjective norms are restricted to a specific behavioral prescription attributed to a generalized social agent and may/may not represent societal "norms" per se (Ajzen & Fishbein, 1980). Subjective norm is a perception of what another thinks he/she should do and may not accurately reflect what that other people may want them to do (Ajzen & Fishbein, 1980).

Ajzen and Fishbein's (1980) TRA suggests that a person's behavior is determined by his/her intention to perform a behavior and that this intention is a function of his/her attitudes and subjective norms toward a behavior. In most cases the general measure of attitudes and subjective norms is sufficient to explain intentions and behavior. However, in some cases, a deeper understanding of the determinants of attitudes and subjective norms is needed, especially if specific intervention strategies are desired to bring about a change in a person's behavior. Therefore, the determinants of attitudes and subjective norms are thought to be a person's specific underlying beliefs. For example, a person may have a favorable or positive attitude towards purchasing an American car but knowing this does not tell you why that attitude exists. By examining that person's underlying beliefs (e.g., American cars are inexpensive, better built, and support the

economy of the United States), specific information is gained about what influences him/her to develop a positive or negative attitude (towards that behavior).

Hence, the direct measure of attitudes is a function of a person's **outcome evaluation** of whether a particular belief is "good" or "bad" (e.g., "Supporting the United States economy is *extremely good*." ) and the **behavioral beliefs** that by engaging in the particular behavior in question (i.e., buying an American car) a certain belief will result (i.e., "Buying an American car will help support the United States economy is *extremely likely*."). The product of these two variables (behavioral beliefs and outcome evaluations) makes up what will be referred to as the **estimate of attitudes**. Similarly, the direct measure of subjective norms is a function of **normative beliefs**, specific referents (i.e., influential people), and the person's willingness to comply with that particular referent (**motivation to comply**). The product of these two variables will be referred to as the **estimate of subjective norms**.

Ajzen (1986) has also added a third component to the theory to address the problem of behaviors that may not be under direct volitional control, termed "perceived behavioral control" (Note: Ajzen has changed the name from TRA to the Theory of Planned Behavior (TPB), which will be used throughout the rest of this paper). This third factor influencing a person's intention to perform a behavior identifies perceived ease and/or difficulty of performing the behavior, the amount of control a person believes they have over the behavior, and is assumed to reflect past experiences as well as anticipated

impediments and obstacles (Doll & Ajzen, 1992). For example, a person who plans to be at a meeting at 3:30 pm across town may perceive obstacles (e.g., held up at work, many traffic lights on the way, Friday rush hour traffic) that will interfere with attending the meeting on time. Therefore, that person's perceived behavioral control will be much less than a person who experienced fewer impediments. A person who perceives many obstacles in the way of performing a behavior is less likely to form an intention to that behavior (Ajzen, 1986). Perceived behavioral control is also thought to contain underlying beliefs (control beliefs) that determine the direct measure of perceived behavior control (These underlying control beliefs will be referred to as the **estimate of perceived behavior control**). In studying a young woman's intention to place or rear a child, a number of obstacles and/or incentives may determine which pregnancy-resolution option a woman will choose.

The idea of looking at what may facilitate or impede behavior is not new to psychology. Internal and external locus of control has been used in many contexts in an attempt to identify the source of a person's control over an action or goal (Rotter, 1966) The original idea of locus of control was too general and broad of a concept, so it was refined to label particular behaviors (e.g., Intellectual Achievement Responsibility Scale and Health Locus of Control). Ajzen (1986) suggests that the refinements to the Locus of Control Theory served to make control beliefs more compatible with behaviors, but still lacked the generalizability to other behaviors. Ajzen (1986) suggests that Bandura's



(1977) concept of self-efficacy, which looks at whether an individual feels confident or capable of performing a particular action, is a closer step to understanding the control an individual has to perform a behavior. Bandura (1977) found that self-efficacy is strongly related to coping behaviors. Ajzen's (1985) concept of perceived behavioral control is closely related to self-efficacy beliefs. The unique feature of this measure is its compatibility and specificity to the behavior of interest in terms of time, action, target, and context (Parker, Manstead, Stradling, Reason, & Baxter, 1992). Resnick and Blum (1985) found that external locus of control was more characteristic of teen mothers who raised their child than women who terminated their pregnancies. This implies that teen mothers (who raised) externalize their control to the environment around them whereas women who terminate their pregnancy internalize their control. The same process that a woman who terminates her pregnancy goes through may also apply to a woman who plans to place her child, since both decisions are in some way a permanent separation from the child. Ajzen's (1988) perceived behavioral control takes this concept of control one step further by examining the realistic constraints that exist and overall confidence a woman has about overcoming those constraints when making her pregnancy resolution decision.

The TRA has been used for a wide range of behaviors and several studies have applied it to health-related behaviors, including choice of breast versus bottle feeding of newborns (Manstead, Proffitt, & Smart, 1983), contraceptive behavior (Boyd &

Wandersman, 1991; Chan & Fishbein, 1993), abortion prediction (Smetana & Adler, 1979), methods of childbirth (Lowe & Frey, 1983), dental hygiene (McCaul, O'Neill, & Glasgow, 1988), weight loss (Schifter & Ajzen, 1985) and many more (see Ajzen & Fishbein, 1980). In the area of abortion, Smetana et al. (1979) found that 92% of the variance was accounted for by a person's behavioral intention towards having/not having an abortion. This finding supports the basic premise of the TRA model. Additionally, normative beliefs were found to be twice as influential as attitudes towards this behavior (i.e., standardized regression coefficients = .463 and .206, respectively) (Smetana et al., 1979). However, Smetana et al. (1979) were unable to consider the possible effects that perceived behavioral control may have on this behavior. The findings of this early study of abortion intentions may suggest how a young mother not considering abortion will decide between placing or keeping her baby.

This use of a multivariate approach to find predictors of the pregnancy-resolution decision for young unmarried women provides a starting point to further explore this complex behavior. In Namerow et al.'s (1993) study, they used predictors (e.g., expectancy-value derived attitudes and variables of social influence by mother and boyfriend) that are similar to what Ajzen and Fishbein (1980) discuss in their TRA. However, Namerow and her colleagues never actually used the entire model of TRA. Instead they employed pieces of the model and constructed the attitudes for their expectancy-value questionnaire from what has been found in the literature and what they

thought was appropriate (Namerow et al., 1993). An important aspect of the TRA is to elicit the specific salient beliefs of the target population. This is done in order to control for potentially different beliefs across subject populations. Previous research has shown that external variables (i.e., race, age, SES) differentiate women who choose adoption and women who raise their children. Using a woman's salient beliefs will capture the demographic differences because those differences will be reflected or mediated in their salient beliefs. Without the full application of Ajzen and Fishbein's model it is difficult to ascertain if a woman's pregnancy-resolution decision is directly accounted for by behavioral intention, attitudinal control, and/or normative control. Cervera (1993) has proposed that the TRA may be beneficial to those involved with providing pregnancy counseling to pregnant unmarried women. By identifying the primary determinants of the pregnancy-resolution process, pregnancy counselors and health professionals who assist pregnant teens can develop better counseling strategies to ensure that choices are well conceived, realistic and consistent with an adolescents' future goals (Cervera, 1993).

The following study employed the TPB model to provide a more rigorous and thorough examination of previously discovered determinants. Unique to this study were self-generated salient beliefs related to a pregnancy resolution choice and a measure of volitional control which has not been studied previously. A further factor worth considering in the context of predicting a woman's final pregnancy-resolution decision is the role played by experience of the behavior to be predicted. A number of studies

have shown that attitudes formed based on direct behavioral experience are more likely to predict the subsequent behavior than are attitudes formed with no behavioral experience (e.g., Fazio & Zanna, 1978; Manstead et al., 1983; Regan & Fazio, 1976). Moreover, Namerow et al (1993) found that knowledge about adoption (i.e., knowing a friend or relative who placed a child for adoption, having placed for adoption previously, etc.) was a strong predictor for placing a child for adoption. Consequently, adoption knowledge was examined in this study to determine its effects on attitudes and the predicted behavior.

Hypotheses:

1). Significant correlations were expected between behavioral intentions and the dependent measure (i.e., the final pregnancy resolution). The direct measures of attitudes, subjective norms and perceived behavioral control are also expected to be significantly correlated with behavioral intentions, and to a lesser degree, with the final pregnancy resolution. Moreover, the estimates of attitudes (sum of the product between behavioral beliefs and outcome evaluations), subjective norms (sum of the product between normative beliefs and motivation to comply) and perceived behavioral control (sum of control beliefs) were expected to correlate with their corresponding direct measures. Finally, the demographic variables (i.e., age, SES, and grade level) were not expected to significantly correlate with the final pregnancy resolution; however, according to Ajzen and Fishbein's theory (1980), correlations may be found with the estimates of the direct

measures of the TRA.

2). The direct measures of attitudes, subjective norms, and perceived behavioral control were all expected to be predictive of behavioral intentions. Moreover, the final regression model with all the variables of TPB was expected to significantly contribute to the prediction of the pregnancy-resolution behavior. It was also hypothesized that adoption knowledge would help in the prediction of behavioral intentions or the final pregnancy-resolution outcome. The demographic variables were not expected to add to the prediction of the pregnancy-resolution outcome.

3). If significant correlations are found between the estimates and their direct measures of behavior, then underlying beliefs, specific referents, and evaluation of the behavior will be examined in a more detailed analysis. It is expected that women who place their child for adoption will have significantly different underlying beliefs from those who decide to raise their child.

### **Pilot Study**

Following the method prescribed by Ajzen and Fishbein (1980), information for questionnaire construction was gathered from several private adoption agencies and maternity homes in Virginia, Tennessee, Illinois, North Carolina, Texas, and New Jersey. Thirteen agencies agreed to participate in this study: Five were private live-in-residence adoption agencies; six were private non-resident adoption agencies; and one was a maternity home for single mothers. Each agency provided 3-10 women for the elicitation

study. A total of 55 women were recruited from the various agencies with only 49 that arrived in time to be included for the questionnaire construction. These mothers were between 15 and 25 years of age ( $M = 18$ ), all were single, and at least 12 weeks pregnant. Moreover, all the women were caucasian and lived in lower to upper income families (Hollingshead, 1975; Two Factor Index  $M = 68$ ).

Women who sought services at an agency were approached by an agency representative (in most cases a licensed social worker), and those who were not married were asked to participate by answering an open-ended self-report questionnaire anonymously. Prior to completing the questionnaires, potential subjects were introduced to the study by a short script (see Appendix A) read by an agency representative. After the introduction the subjects who chose to participate read and signed the informed consent form (see Appendix B).

Subjects' salient beliefs and norms were collected using open-ended self-report (see Appendix C and D). Women were asked to give their opinion of what is positive and negative about placing a child for adoption and/or raising their child, who will be influential in that decision, and what will hinder them from carrying out the behavior. Filling out the questionnaire took less than 20 minutes on average to complete. All the women were paid \$5.00 after the examiner had received the completed questionnaire. The money was given to the agency (who delivered the money to the women) that she was involved with so that confidentiality was not breached.

From the answers to the open-ended questions counts were made of various attitude and control beliefs and referent (e.g., mother, father, etc.) or groups (e.g., church, friends, co-workers) associated with the decision to place or raise a child. Ajzen and Fishbein (1980) have suggested several methods for including salient beliefs in the final questionnaire. To avoid arbitrarily deciding which beliefs should be included they suggest using a certain percentage (e.g., 70-75%) of all emitted beliefs. Consequently, those beliefs and referents that accounted for 70% of the overall total (the "salient" beliefs and referents of this particular population) were included in the questionnaire developed by the main study described below.

## **Method**

### **Subjects**

Subjects were recruited from the same agencies used in the pilot study. Three agencies that participated in the original study were unable to continue with the project in the second phase due to a low census. A total of 57 women were recruited for the study. Three subjects were younger than 15 years of age and could not be used because of the age limit of the study, and two subjects did not fill out the questionnaire correctly and were consequently dropped from the analysis. The 52 (26 who placed their child and 26 who raised their child) subjects that remained were used for all of the analyses except for two subjects which were not used for the final logistic regression and multivariate analyses. The two subjects were not used for these analyses due to their late delivery

dates, which was important for the identification of the dependent variable (i.e., pregnancy resolution).

These 52 women were all caucasian, 15 to 32 years of age ( $M = 19$ ), and ranged in SES from lower to upper income families (Hollingshead, 1975;  $M = 74$ ). The study was made available to all women who sought services at the agencies, and those that were not married were asked to participate by answering several self-report questionnaires. Subjects were paid \$10.00 after the examiner had received the completed questionnaires. The money was sent to the agency which was responsible for distributing it to the participants.

### Measures

#### Theory of Planned Behavior Questionnaire. (Appendix E)

The TPB has three primary determinants of an individuals' behavioral intention to perform a given behavior: (1) attitudinal influences, (2) normative influences, and (3) perceived behavioral control influences. In accordance with Ajzen and Fishbein's (1980) theory, attitudes toward the behavior were measured directly and by an estimate of the proposed constituents, namely behavioral beliefs and outcome evaluations. The direct measure of attitude was calculated by taking the mean of the semantic differentials. The estimate of attitudes was derived by summing the products of behavioral beliefs and outcome evaluations. Likewise, subjective norm was measured directly and by an estimate by assessing the subject's normative beliefs and motivations to comply. The estimate of



subjective norms was derived by summing the products of normative beliefs and motivations to comply. Moreover, perceived behavioral control was measured directly by averaging three items that were similar to those used by Ajzen and Madden (1986). An estimate measure of perceived behavioral control was also assessed by summing the salient control beliefs.

The following are examples of items included to assess the model's terms, shown in order in which they appear on the questionnaire. The TPB questionnaire was separated into two sections (i.e., adoption and parenting questionnaire) because not all of the underlying beliefs corresponded to each pregnancy resolution decision.

(1) ***Behavioral Intention (BI)***

This measure was assessed by asking each woman whether they intended to raise their child and whether they intend to place their child for adoption (e.g., "I intend to place my baby for adoption after I deliver in the next few months." and "I intend to raise my baby after I deliver in the next few months."). A 7-point Likert scale was used for this question ranging from *extremely likely* (3) to *extremely unlikely* (-3) and *neither* (0) as a neutral response.

(2) ***Attitudes (ATT)*** (Direct measure)

The attitude toward the behavior refers to the degree to which a person has a favorable or unfavorable evaluation of a behavior (e.g., "Placing my child for adoption after I deliver in the next few months is ..."). A 7-point Likert scale was used to assess four

semantic differentials (Ajzen & Fishbein, 1980). The endpoints of the scale were *good-bad*, *beneficial-harmful*, *pleasant-unpleasant*, and *rewarding-punishing*. Other studies have found the internal consistency of this scale to range from  $\alpha = .72$  to  $.86$  (Chan & Fishbein, 1993; Schifter & Ajzen, 1985; Traeen & Nordlund, 1993).

### (3) *Outcome Evaluations (OE)*

There were nine OE statements for the adoption questionnaire and seven for the parenting questionnaire. This variable refers to the evaluation that is given to each consequence of a particular belief (e.g., "Having a mother and father is...", "Having an education is...", etc.). This variable was rated on a 7-point scale ranging from *extremely good* (3) to *extremely bad* (-3) and neither (0) as a neutral response.

### (4) *Behavioral Beliefs (BB)*

For every outcome evaluation there was a corresponding behavioral belief (e.g., "Placing my baby for adoption after I deliver in the next few months would insure me that my child will have a mother and father", and "Placing my baby for adoption after I deliver in the next few months would allow me to finish my education."). Each question was rated on a 7-point scale ranging from *extremely likely* (3) to *extremely unlikely* (-3) and *neither* (0) as a neutral response.

### (5) *Subjective Norms (SN)* (Direct measure)

Subjective norms was measured by, "Most people important to me think I should place my baby for adoption after I deliver in the next few months."). This was rated on a 7-

point scale ranging from *extremely likely* (3) to *extremely unlikely* (-3) and *neither* (0) as a neutral response.

**(6) *Normative Beliefs (NB)***

Six important reference individuals were identified from the elicitation study mentioned above (i.e., mother, father, baby's father, family, church and friends). This scale measured the perceived normative pressure the women was experiencing from each referent (e.g., "My mother thinks I should place my child for adoption."). This was rated on a 7-point scale ranging from *extremely likely* (3) to *extremely unlikely* (-3) and *neither* (0) as a neutral response.

**(7) *Motivations to Comply (MC)***

This scale corresponded to each normative belief (e.g., "Generally speaking, I want to do what my mother thinks I should do.") This was rated on a 7-point scale ranging from *extremely likely* (3) to *extremely unlikely* (-3) and *neither* (0) as a neutral response.

**(8) *Perceived Behavioral Control (PBC)* (Direct measure)**

Perceived behavioral control refers to the perceived ease or difficulty of performing a behavior and is assumed to reflect past experience as well as future impediments and obstacles (e.g., "For me to place my baby for adoption after I deliver in the next few months is..."). Three different semantic differential scales were used on a 7-point scale: *easy--difficult*; *likely--unlikely*; *in control--out of control*. The internal consistency for this scale has been mixed with a range from  $\alpha = .40$  to  $.87$  (Chan & Fishbein, 1993; McCaul,

Sandgren, O'Neil, & Hinsz, 1993; Schifter & Ajzen, 1985). There has also been a considerable amount of variability in the way that the individual questions have been worded and the type of semantic differentials that have been used (Ajzen, 1988; Chan & Fishbein, 1993; McCaul et al., 1993; Schifter & Ajzen, 1985).

**(9) Control Beliefs (CB)**

Eight separate CB statements were gathered from the elicitation study for both the parenting and adoption questionnaire (e.g., "Knowing the adoptive parents will make it (7-point scale) *extremely easy--extremely difficult* to place my baby after I deliver in the next few months).

**General Information Form.** (Appendix F)

This form asked for general demographic information such as race, age, and education level.

**Pregnancy/Adoption Form.** (Appendix G)

This form asked about the circumstances of the pregnancy and the amount of exposure or experience the women had with adoption, parenting, birth control and abortion.

**Procedure**

All the women were recruited by agency representatives during the woman's second and third trimester ( $M = 28$  weeks). Cervera (1993) recommended assessing a woman's intentions during the second and third trimester of pregnancy because this allows for the shortest time between intention and behavior. The longer the interval between the

assessment of intent and the behavior, the lower the correspondence between the two (Cervera, 1993). The study was made available to all women, however, due to the collection method of the data there was no way to determine how many women refused to participate.

The subjects were read a scripted introduction by an agency representative (see Appendix H) that explained the consent form and the purpose of the study (see Appendix I). Participants were advised that: (1) all information was to be used for research purposes only; (2) no one affiliated with either the adoption agency or other outside officials will have access to their individual completed measures and; (3) the consent form was the only place their name would appear and would be kept by the agency after the questionnaires were given to the investigator. Each questionnaire had a randomly generated code number that corresponded to the appropriate consent form without revealing the identity of the subject. To further insure confidentiality, the subjects were provided with an envelope to place their completed questionnaires in before sealing and returning them to the agency representative. Questionnaires were then mailed directly to the investigator via self-addressed stamped envelopes provided by the investigator. Finally, each agency was contacted 1-2 weeks following the indicated birth date of the participant's child to determine the final pregnancy resolution. The investigator used the corresponding code number on the questionnaire when speaking with an agency representative to determine the outcome for each pregnancy.

Subjects were presented with the TPB questionnaires (see Appendix E) along with some basic demographic data (see Appendix F and G). The examiner designed the TPB questionnaire so that it could be self-administered. However, the instructions for the TPB questionnaire were reviewed by the agency representative so that each woman understood what was involved in case a question arose.

### Dependent Measure

The dependent measure was the outcome of the pregnancy resolution (i.e., 1=placed the child for adoption, 0=decided to raise the child) that was collected about two weeks after the birth date by contacting the appropriate agency.

### Analysis

Ajzen and Fishbein (1980) found that when a situation involves a choice between two alternatives, a better prediction can be obtained by considering the difference between the intentions concerning each of the two alternatives than by considering either intention individually. Consequently, women were presented with both pregnancy choices (i.e., parent child or place child for adoption) in the questionnaire and a differential score was calculated between the two. In each case the value for raising a child was subtracted from the value for placing a child for adoption, and the resulting measures will be referred to as *differential (DIFF) BI, DIFF ATT, DIFF SN, and DIFF PBC*. In addition, DIFF scores were calculated for the estimate of subjective norms, however, the estimates for attitudes and perceived behavioral control could not be calculated because of the different beliefs

used for each pregnancy choice (e.g., placing a child for adoption or raising a child).

Zero-ordered correlations were calculated using SAS CORR between all the variables collected in the study. To determine if the TPB is a useful model for prediction of pregnancy resolution, several hierarchical regressions were performed using SAS STEPWISE and LOGISTIC regression procedures. Finally, SAS Multivariate Analysis of Variance (MANOVA) was conducted on the salient attitudinal and normative beliefs, the outcome evaluations and motivation to comply between women who placed their baby for adoption and women who decided to raise their baby.

## **Results**

### **Demographic Variables**

Comparisons were made on demographic characteristics (e.g., age, socioeconomic status, grade level, etc.) between the pilot group and the present experimental group to insure compatibility. Table 1 reveals a summary of the descriptive and comparison statistics for the two groups. No significant differences were found among the groups on any of the variables examined. T-test comparisons were also conducted between the women who raised their children and women who placed their children for adoption on selected variables from the questionnaires (see Table 2). Women who placed had significantly higher values on DIFF ATT, DIFF SN, and DIFF PBC than women who raised their children. Moreover, there was a trend for women who placed to be older and have achieved a higher grade level than women who raised their children.

### Reliability Checks

The internal consistency was examined for the four semantic differential items of the direct measure of ATT ( $\alpha = .92$ ). The internal reliability of this scale was considerably better than other applications of this measure. Hence, an average score was calculated across the four differentials. The internal reliability was also calculated for the three semantic differential items of the direct measure of PBC ( $\alpha = .67$ ). This coefficient reveals a reasonable relationship between the items for this measure compared to what has been found with other applications of this measure. The three semantic differentials were averaged into a single score for the direct measure of PBC.

An abbreviated questionnaire (see Appendix J) was constructed to check the test-retest reliability of a sub-sample ( $n = 20$ ) of women on BI, and the direct measures of ATT, SN, and PBC (Only the adoption related questions were used because the experimenter did not want to place an undue burden on the women who participated in the project). The time interval between the first and second administration of this measure was  $M = 1.7$  months. Significant correlations were found between the first and second administration of the questionnaire across all measures: BI ( $r = .93$ ); ATT ( $r = .86$ ); SN ( $r = .77$ ); PBC ( $r = .74$ ).

### Simple Correlations

The zero-ordered correlations and descriptive statistics for the selected variables that were used in the regression analyses are presented in Table 2. In general, this group of



women had negative attitudes towards placing their child for adoption ( $M = -1.13$ ), and they perceived a negligible amount of normative pressure not to place their child ( $M = -.14$ ). In addition, they did not perceive themselves as having much control over their decision to place their child for adoption ( $M = -.31$ ). DIFF BI was significantly related to behavior ( $r_{pb} = .75$ ), thus satisfying Ajzen and Fishbein's (1980) condition that the TRA is only applicable when behavior and intentions are highly correlated.

Table 3 and 4 present the descriptive statistics and correlations for the estimates of attitudes and perceived behavioral control and other selected variables. Significant correlations were found between the estimate measure of attitudes (sum of the product between salient behavioral beliefs and outcome evaluations) and DIFF ATT towards both placing a child for adoption ( $r = .78$ ) and raising a child ( $r = -.83$ ). According to Fishbein and Ajzen (1980) significant correlations are needed to justify the examination of differences in specific underlying beliefs towards a particular pregnancy resolution. Similarly, significant correlations were found between the estimate of perceived behavioral control (sum of salient control beliefs) and DIFF PBC towards both placing a child ( $r = .59$ ) and raising a child ( $r = -.59$ ). A significant correlation was also found between the differential estimate measure of subjective norms (sum of the product between salient normative beliefs and motivation to comply) and DIFF SN ( $r = .63$ ). Upon closer examination it was discovered that weighted normative beliefs by motivation to comply reduced the relationship with DIFF SN, DIFF BI and the behavior. When

normative beliefs are summed and examined without the product of the motivation to comply, the correlation is significant with DIFF SN ( $r = .91$ ), DIFF BI ( $r = .79$ ), and the final pregnancy resolution behavior ( $r_{pb} = .67$ ).

### Model Prediction of Behavioral Intention

As shown in Table 6 the original Theory of Reasoned Action (TRA) was not supported by the first hierarchical regression analysis. According to the TRA both attitudes and subjective norms should significantly predict behavioral intentions (Ajzen & Fishbein, 1980). However, only DIFF ATT significantly predicted (standardized regression coefficient =  $.56$ ,  $p < .01$ ) DIFF BI, whereas DIFF SN did not (standardized regression weight =  $.14$ ,  $p = .18$ ). Together both variables accounted for 77% of the variation in a woman's intention to raise or place a child for adoption. In addition, on step two of the model DIFF PBC entered the model as a significant predictor (standardized regression coefficient =  $.26$ ,  $p < .01$ ) of DIFF BI. DIFF PBC accounted for an additional 3% of the variation in a woman's intention to raise or place her child for adoption. All three variables of TPB accounted for 79% (78% adjusted) of the variability in intentions to raise or place a child for adoption. It appears from the data that attitudes are the most important factors predicting a woman's pregnancy resolution for her child followed by perceived behavioral control and then a negligible influence of subjective norms.

The second hierarchical regression replaced DIFF SN with DIFF normative beliefs

(NORM). The regression model above was then repeated (see Table 6). Both DIFF ATT and DIFF NORM were significant predictors of DIFF BI (standardized regression weights = .50, and .25, respectively,  $p < .01$ ). Together the variables accounted for 79% of the variability in DIFF BI. Additionally, DIFF PBC entered the second step of the model as a significant predictor (standardized regression coefficient = .23,  $p < .05$ ) and contributed another 2% of the variation in DIFF BI. All three independent variables accounted for 81% (79% adjusted) of the variability in intentions to raise or place a child for adoption. Again the measure of DIFF ATT was a considerably stronger predictor than was the measure of DIFF NORM and DIFF PBC.

A third hierarchical regression was performed regressing DIFF BI with all three variables of the TPB (DIFF ATT, DIFF SN, and DIFF PBC) entered simultaneously on the first step followed by age, SES, and grade-level (see Table 7). Age was the only demographic variable to enter the model as a significant predictor of DIFF BI (standardized regression coefficient = .18,  $p < .05$ ), accounting for an additional 3% of the variation in DIFF BI beyond that explained by the TPB (see Figure 1). The same regression was run a second time with the substitution of DIFF NORM for DIFF SN. Age was again found to be a significant predictor of DIFF BI (standardized regression coefficient = .16,  $p < .05$ ) accounting for an additional 2% of the variance. However, with the addition of age in this model DIFF PBC dropped out as a significant predictor of DIFF BI (standardized regression coefficient = .18,  $p = .09$ ) (see Figure 2).

### Model Prediction of Pregnancy Resolution Behavior

According to Ajzen and Fishbein's (1980) TRA, intentions are thought to be the single best predictor of behavior. A logistic regression was used to examine the relationship between DIFF BI, the other variables of TPB, age, SES, grade level, and adoption knowledge (a dichotomous variable indicating whether the women had prior experience with adoption) with the final pregnancy resolution behavior. Logistic regression is similar to a standard multiple regression in that it permits the assessment of changes in deviance, which is the equivalent of a residual sum of squares in normal multiple regression. The addition of variables to the model results in a reduction in deviance, and changes in deviance provide a test of significance for the predictor variables (Meyers, 1990; Manstead, Proffitt, & Smart, 1983). The maximum likelihood estimate for this model was  $X^2(49) = 32.978$ ,  $p < .001$ , indicating a good fit between observed and expected frequencies for DIFF BI as a predictor. The overall deviance of the model was significantly reduced from 69.32 to 36.34 with the inclusion of DIFF BI. The standardized coefficient estimate for DIFF BI was -1.19 and the chi-square test statistic for DIFF BI significant inclusion in the model was  $X^2 = 18.59$ ,  $p < .001$ . No other variable significantly reduced the deviance of the model.

### Factors Differentiating Women Who Parented and Women Who Placed

To understand why some women place their children for adoption and others decide to raise them, comparisons were made between these two groups on specific behavioral,

normative, and control beliefs, outcome evaluations, and motivations to comply. To control for inflated alpha values when examining a number of comparisons a MANOVA was calculated for the estimate of attitudes (sum of the product between behavioral beliefs and outcome evaluation) to test the overall differences between the two groups of women for this measure. A Wilk's lambda revealed an overall significant difference between the two groups on these behavioral cross products,  $\Lambda = .48$ ,  $F(14, 35) = 2.75$ ,  $p < .007$  (see Table 8). A MANOVA was also computed for outcome evaluations to test the overall differences between the two groups of women. The Wilk's lambda criterion revealed an overall significant effect between the two groups,  $\Lambda = .49$ ,  $F(14, 35) = 2.64$ ,  $p < .010$ . Consequently, the univariate results between the two groups with respect to underlying outcome evaluations are reported in Table 8. Five of the seven outcome evaluations for placing a child for adoption revealed significant differences. Specifically, differences were found concerning family of origin issues (i.e., not having a biological mother, not knowing where a person came from, having a mother and father, and not being able to watch your child grow-up). Four of the seven outcome evaluations for raising a child revealed significant differences. Specifically, differences were found on beliefs related to personal benefits or drawbacks to the woman (i.e., having a baby to love and care for, having someone to love me, and giving up things that are enjoyable).

A third MANOVA was calculated for behavioral beliefs between the two groups of

women (see Table 8). The Wilk's lambda criterion revealed an overall significant effect between the two groups,  $\Lambda = .50$ ,  $F(14, 35) = 2.54$ ,  $p < .05$ . Univariate results revealed five out of seven significant differences on measure of behavioral beliefs for placing a child for adoption compared to all seven significant differences on behavioral beliefs for raising a child. Women who placed their child were more likely to believe that they would "be able to attend school and achieve their life goals", and that their child would "have a mother and father", more so than women who raised their child. Conversely, beliefs rated by women who raised their child were more likely to predict that they will be "able to achieve financial security and opportunities for their baby", "have someone to love me", "love and care for their baby", and "know that their baby is being treated well" more so than women who placed their child for adoption.

The mean normative beliefs ratings of the two groups of women are shown in Table 9. MANOVA's confirmed that the differences between the mean vectors of the two groups' ratings were significant,  $\Lambda = .37$ ,  $F(12, 37) = 5.25$ ,  $p < .0001$ . Univariate tests revealed that women who raised their child believed that the baby's father and their friends are most strongly against placing a child for adoption. Women who placed their child rated their mothers, fathers and family as the most supportive of their decision to place a child. Friends and the baby's father were rated by women who raised their baby as being the most supportive of their decision to do so, whereas, women who placed their babies for adoption, rated their mother and father as being the most influential in not

wanting them to raise their child. No differences were found between the two groups of women for motivation to comply,  $\Lambda = .735$ ,  $F(12, 37) = 1.11$ ,  $p = .3802$ .

The mean control beliefs ratings of the two groups of women are found in Table 10. Wilk's lambda criterion revealed a significant difference in the mean vector ratings for the two groups,  $\Lambda = .42$ ,  $F(16, 33) = 2.83$ ,  $p < .006$ . Univariate tests revealed that women who placed their babies believed that "having future information about their child", and "the support of their family" would make it easier to place than women who decided to raise their child. Moreover, women who raised their child rated more highly that "carrying a child for nine months" would make it harder for them to place than women who placed their child. However, both groups of women rated this choice negatively. In addition, women who raised their child rated more highly "having support from their family" and "a place of their own" as factor that would make it easier to raise their child over that of women who placed their child. Both groups of women rated "lack of education" as factor that would make raising a child difficult. However, women who placed their child rated this more negatively than those who raised their child.

## Discussion

The purpose of the present study was to find support for the TPB as it is related to a woman's pregnancy resolution behavior. Previous research has focused on retrospective characteristic differences between women who placed and raised their children with little or no useful information about possible areas of intervention and/or improvement for the process of adoption. Namerow et al.'s (1993) study was the first to move away from identifying characteristic differences of these women toward looking at what determines their decision in a multivariate analysis. This study takes another step forward by analyzing a theoretical model of behavior (i.e., TPB) that brings together the complex factors of the decision making process into a framework that can more readily explain to what degree certain factors are more influential than others (i.e., attitudes, social norms, and perceived control). The current literature is extended by providing a theoretical model for understanding what influences a woman to raise or place her baby for adoption, but more importantly it provides specific information that may be useful to adoption and state agencies that are involved in helping young woman to make a responsible decision that will be both beneficial to her baby and herself (Cervera, 1993).

The TRA (Ajzen & Fishbein, 1980) assumes that intentions are the immediate determinants of behavior. In this study intentions were predictive of a woman's decision to raise or place her child for adoption, thus meeting the requirement of Ajzen & Fishbein's (1980) TRA that states behavioral intentions mediate the effects of attitudes



and subjective norms. However, the TRA was only partially supported when predicting behavioral intentions from attitudes and subjective norms.

DIFF SN only accounted for a small amount of the variance (less than 2% after attitudes had been accounted for in the regression model) in predicting behavioral intentions and had an insignificant regression weight, even though it correlated highly with behavioral intentions ( $r = .75$ ,  $p < .001$ ). According to Ajzen and Fishbein's (1980) theory, attitudes and subjective norms are separate constructs that should both significantly contribute to the variability in intentions, albeit at different magnitudes (Ajzen, 1988). In the present study it was found that attitudes was the single most important factor in predicting behavioral intentions. DIFF ATT accounted for the largest part of the variance in DIFF BI and was three times as strong as the DIFF SN and twice as strong as DIFF PBC when it was entered in the regression model, although this finding is not unusual in light of applications of this theory to other behaviors. Fishbein (1980) has found that across a number of applications of this theory most behaviors are under attitudinal control. Moreover, several studies have found strong evidence for crossover effects from subjective norms to attitudes (Oliver & Bearden, 1985; Shimp & Kavas, 1984). Crossover effects refers to the amount of influence that normative perceptions (i.e., subjective norms) have on cognitive factors such as attitudes or vice versus (Oliver & Bearden, 1985). For example, a student may know that a relevant other (i.e., parents) strongly desire that he/she attend a specific university, it is likely then that an existing

attitude will be modified as a result of this knowledge. Analogously, a person may have a set of positive attitudes towards staying fit and may infer that these feelings of favorableness towards staying healthy are normal and widely endorsed by others, and that others in the environment would not only agree with these attitudes, but would express their desire to engage in them. The evidence for the crossover effects suggests that the attitude construct may be more complicated and diverse than was originally presumed; crossover effects may also explain why the measure of attitudes is consistently the more important variable when using the TRA (Oliver & Bearden, 1985). Fishbein and Ajzen (1981) suggest that crossover effects are unavoidable because norms and attitudes are intertwined to some extent.

Interestingly the DIFF NORM was a better predictor of DIFF BI than DIFF SN. There are several possibilities why this may have occurred. First, the direct measure of subjective norms is based on one question that asks the subject to generalize the effects of normative pressure for all possible referents for the behavior examined in this study. Normative beliefs (sum of the six salient referents), however, are more specific to influences of particular referents and thus may have more variability in the sum total than a single statement that asks for a generalization across all referents. Theoretically, subjective norms is a function of normative beliefs. Hence, if a person's salient beliefs and motivation to comply were able to be accurately measured, the estimate measure of subjective norms should be perfectly correlated with a direct valid measure of subjective

norms. However, Fishbein (1980) has stated that because there is some error of measurement it is conceivable in some cases that the estimate measure of subjective norms (in this case sum of the normative beliefs) may be a more valid and reliable predictor of intentions than a direct measure of subjective norms. Consequently, a second analysis was conducted in order to test this assumption using the sum of normative beliefs in the hopes of increasing the variability of the measure to better predict behavioral intentions. It was found that both attitudes and normative beliefs (sum of the six salient referents) entered the regression model significantly and increased the amount of variance that was accounted for by 2%.

Ideally, the estimate of subjective norms (sum of the product between normative beliefs and motivation to comply) would have been used in replacement of the direct measure of subjective norms instead of examining sum of normative beliefs, separately. However, it was discovered that motivation to comply reduced the correlation between with the direct measure of subjective norms and the estimate of subjective norms ( $r = .56, p < .001$ ). The correlation between the sum of normative beliefs and the direct measure of subjective norms was ( $r = .91, p < .001$ ). Several researchers have reported trouble with the predictive utility of the estimate of subjective norm weighted by motivation to comply (Miniard & Cohen, 1981; Ajzen & Fishbein, 1969; Fishbein & Ajzen, 1981). Motivation to comply is measured "generally" instead of linking the question to the specific behavior that is being studied, as is done with the other measures

of TRA. It has been found that when a moderate amount of specificity is given to the behavioral domain being studied, the prediction using motivation to comply increases (Miniard & Cohen, 1981). Unfortunately this study was completed based on Ajzen and Fishbein's (1980) recommendation to use motivation to comply in a general format instead of a more specific one.

Another possible explanation for the nonsignificant regression coefficient of DIFF SN could be attributed to the multicollinearity with DIFF ATT ( $r = .77, p < .001$ ). The high correlation between these two variables makes it difficult to estimate and interpret the effects of these constructs on DIFF BI. Miniard and Cohen (1981) have argued that multicollinearity makes the two constructs of subjective norms and attitudes indistinguishable from one another. Studies using the TRA often make statements about the strength of one standardized regression coefficient over another. However, tests used to assess the significance of standardized regression coefficients are sensitive to the degree of multicollinearity among the predictors (Miniard & Cohen, 1981). Consequently, an important factor such as subjective norms in this study appears to be weak or insignificant as a predictor because it is competing for the same amount of overlapping variance in the model as attitudes. The relatively insignificant effect of this particular construct on DIFF BI may mislead us to conclude that DIFF SN are not important in predicting intentions to raise or place a child for adoption. Since Fishbein and Ajzen do not attempt to explain the interactive effects that attitudes and subjective norms exert on each other, the process

leading to the pregnancy resolution decision may be oversimplified (Miniard & Cohen, 19981).

There is, however, considerable evidence that indicates that attitudes and subjective norms are separate constructs. A recent article by Trafimow and Fishbein (in press) suggests that if the two constructs are separate, then it is logical to assume that subjects will have more cues in common within a particular behavioral or normative belief than between belief types. Moreover, when subjects attempt to retrieve a particular belief, there should be some clustering by belief type (Trafimow & Fishbein, in press). The results of this experiment indicated that subjects clustered their beliefs into their corresponding beliefs types when recalling the items, however, this clustering did not take place when subjects were given control tasks (e.g., memorize items) (Trafimow & Fishbein, in press). Another study by Trafimow and Fishbein (1994) revealed that intentions to perform a behavior under attitudinal control was more influenced by manipulations made to attitudes as opposed to manipulations made to subjective norms. This supports the notion that the two constructs are functionally separate.

It was expected originally that subjective norms would greatly influence intentions because of previous findings indicating that parents and the father of the baby play a significant role in influencing a woman's pregnancy resolution decision (Namerow et al., 1993; Furstenburg, 1980; McLaughlin, 1989). Moreover, Sementa and Alder (1990), using a similar pregnancy resolution decision (comparison between raising a child and

having an abortion), found subjective norms to be twice as strong as attitudes in predicting a woman's intention to abort her child. It was thought that because adoption is similar to abortion in that it is a permanent decision that effects more than the just the woman having the baby (e.g., family, baby, friends, etc.), that subjective norms would exert a greater influence over the behavioral intention. However, in this particular sample of women, this was not the case.

An explanation for this may be that attitudes are more important for women deliberating over the decision to place a child because of the time available during pregnancy (i.e., 9 months) to ruminate about their final decision and to listen to many different normative view points that may over time become incorporated into their attitudes. Earlier in this paper it was mentioned that crossover effects do take place between subjective norms and attitudes with a stronger likelihood that subjective norms influences attitudes (Oilver & Bergen, 1985; Shimp & Kavas, 1984). Furthermore, a study by Oilver and Bergen (1985) found that when a person is highly involved in a decision they are more likely to rely on their attitudes when making an intention to perform a particular behavior. Clearly, women deciding to place their baby for adoption are very involved in their decision from counseling with agency representatives to their own internal emotional struggle with the ramifications of placing a child for adoption. On the other hand, women who have an abortion have less than 3 months to make up their mind and may not have time enough to become over involved in the decision and

its outcome. Making a decision to abort involves a combination of complicating factors: publicly and privately the issue is highly emotional; a much shorter time is allowed in which to make the decision compared to raising or placing a baby for adoption; and the decision is, to some extent, public involving far-reaching consequences for others as well as well as for the woman herself. In this highly charged atmosphere women who are considering abortion may be more inclined to listen to what others think they should do rather than rely on their personal beliefs. It may be that complying with normative pressure insures the woman that she is not alone in making this decision which in turn reduces the anxiety and guilt that may be associated with abortion, Sementa and Alder (1990) did not examine the effect of the alternative intention to raise a child, so it is difficult to know the effect of this choice has on a woman's behavior to abort.

In this study perceived behavioral control was found to significantly add a minimal amount of variance in a woman's pregnancy resolution intention. The minimal contribution of perceived behavioral control is not an unusual finding when applying this construct to other behaviors (Chan & Fishbein, 1993). There are several possible explanations for this minimal support. First, the three items that were averaged to comprise the direct measure of perceived behavioral control had a moderate internal consistency of  $\alpha = .67$  which may indicate a problem with a unified construct for the particular questions used or a poor application of the questions by the experimenter. The wording for the perceived behavioral control questions came directly from Ajzen's

suggested method (Ajzen, 1988) and therefore it is unlikely that the questions were misrepresented. A more likely explanation is that the construct as currently defined may be problematic. Upon closer examination of the means of the individual questions that make up the direct measures of perceived behavioral control, a divergent response is given between the question of control--no control ( $M = 0.65$ ) compared to the question difficult--easy ( $M = -1.19$ ). This indicates that within the direct construct of perceived behavioral control there is a contradictory response in what the TPB would predict. Based on Ajzen's (1988) original premise, perceived behavioral control will increase prediction when a behavior is not under the actor's control, and the less control a person experiences the more likely they are to believe that the behavior will be difficult to perform. However, the findings in this study indicate that women identify themselves as having control over their intentions but believe the pregnancy resolution decision no matter what outcome will be difficult. It is not surprising then that perceived behavioral control did not add much in the way of variance in this study because there was a discrepancy in how the women reported compared to what the theory predicts. Moreover, the correlation between the easy--difficult question ( $r = .68, p < .001$ ) and behavioral intentions was stronger than that of the control--no control question ( $r = .50, p < .001$ ) and behavioral intentions. Thus, it seems that the pregnancy resolution decision is under the control of the women despite the fact that there may be some obstacles that will make her decision more difficult. Ajzen did introduce a new conceptualization of perceived



behavioral control as reflecting the perceived ease or difficulty of performing a behavior separate from that of control over a behavior (Ajzen, 1991). In this study such a construct may be more viable in predicting intentions than the original conceptualization utilized presently.

One last concern with the TPB is the inclusion of age after controlling for the effects of TPB variables (i.e., attitudes, subjective norms and perceived behavioral control) as a significant predictor of DIFF BI. According to Ajzen and Fishbein (1980) age would be considered an external variable that should not directly predict intentions, but instead be mediated through estimates of attitudes, subjective norms and/or perceived behavioral control. The amount of variance that age (3% of the variance) accounted for in the regression model is a relatively small compared to the large amount of variance of DIFF ATT (75% of the variance) and does not violate the general premise that the TPB variables will exhibit the majority of the effects on intentions. However, the fact that age accounts for even a small amount of the variance above and beyond the TPB variables indicates that it is an important variable to consider. In this particular sample the skewness of age in favor of younger women (only 4 women were over 24-years-old) and the multicollinearity between DIFF SN and DIFF ATT may have weakened the attitudinal and normative components ability to completely mediate the effects of age upon intentions to raise or place a child.

Additionally, several assumption of the TRA were still maintained. For example,

Ajzen and Fishbein suggest that because intentions are determined by attitudes, subjective norms, and perceived behavioral control, then the effect of the external variable (i.e., age) should correlate with one or all three of these components. Age was found to correlate with both the DIFF ATT ( $r = .29, p < .01$ ) and DIFF PBC ( $r = .33, p < .01$ ). Age did not have an effect on subjective norms, however, there are several possible difficulties with this construct (see discussion above).

Finally, some of the differences in underlying beliefs (i.e., behavioral, normative and control) and outcome evaluations will be discussed for women who raised and women who placed their babies. Overall, the current results supported the basic assumptions of the TRA. The final pregnancy resolution behavior was predicted from DIFF BI, intentions were predicted from primarily DIFF ATT, and attitudes were predicted from the estimate measure of attitudes. Although subjective norms did not predict very well in the regression model (i.e., due to multicollinearity effects), it did correlate significantly with DIFF BI as did the estimate of subjective norms correlate with the direct measure of subjective norms. Normative beliefs were also found to significantly predict DIFF BI when beliefs were not weighted by motivations to comply. Moreover, DIFF PBC predicted a small amount of the variance in DIFF BI and the estimate of perceived behavioral control significantly correlated with the direct measure of perceived behavioral control. Because the major assumptions of the TRA and TPB have been met, Fishbein and Ajzen (1980) suggest that it is crucial to the understanding of the behavior that the

underlying beliefs are examined. There were many differences that were revealed between the two groups of women for their behavioral beliefs, outcome evaluations and the cross product between the two. However, only the highlights will be mentioned here. The women who placed their children for adoption believed that having a mother and father while growing up was "extremely good" compared to women who raised their children. Moreover, women who placed their children expected that their children would have a mother and father whereas, the women who raised their children did not. A negative concern for both groups of women was that they would not be able to know if their child was being loved and cared for properly. However, women who placed their child for adoption did not rate this evaluation as negatively, even though they believed that there was a strong likelihood that this would occur. Both groups of women also believed that finishing school and achieving life goals were good, however, only women who placed their children for adoption believed that they would be able to attain these goals. Finally, women who raised their children were more positive about giving up things they enjoyed doing compared to women who placed their child. Overall, the women believed that financial security for their children was "extremely good" with women who placed expecting that this would not be achieved if they had raised their child.

There were also dramatic differences between the two groups of women for all of the normative beliefs. The referents most differentiated were the woman's father, baby's

father, and family. Mothers of the women differentiated between the two groups of women, but did not differentiate as strongly as would be expected from previous studies (Namerow et al., 1993). Motivation to comply variables did not reveal any significant differences between the two groups.

Women who parented and women who placed their children also differed on several control beliefs. "Having future information about the child" was perceived by women who placed as a factor that made it easier for them to do so compared to women who raised their child. Women who raised their child reported that "having the support of ones family" made it easier to raise their child than women who placed. Both groups of women reported that "not having an education" made it difficult to raise a child with women who placed rating this more negatively.

There are several limitations in the present study that should be carefully considered. First, the sample of women collected for this study included only caucasian women. Previous research in this area has found significant racial and cultural differences in relinquishment rates and reasons for relinquishment (Kalmuss, 1992; Mclaughlin et al., 1988; Mech, 1986). Consequently, it will be important for this study to be replicated with a more racially diverse sample of women. Special attention should be give to african american teen mothers and babies because they are more at risk for health and economic difficulties and are the least likely to place their children for adoption through a private adoption agency (Kalmuss, 1992; Mclaughlin et al., 1988). Second, several

methodological problems occurred with the construct of subjective norms. One such problem was the reduction of the relationship between the direct measure of subjective norms and its estimate due to the weighted of the motivations to comply variable. A solution to be tried in a replication of this study could be to increase the specificity of motivation to comply to the behavior being studied. There are no clear answers on how to address the issue of multicollinearity between attitudes and subjective norms. However, it may be with a larger sample of women that this problem would not have occurred or this may indicate a fundamental flaw in the separateness of attitudes and subjective norms as different measurable constructs. Finally, perceived behavioral control accounted for some variance in women's intentions, yet questions still remain about the singularity of this construct. There is some evidence from this study to indicate that the amount of control a woman has is not necessarily contingent on how difficult or easy she perceives a behavior is to perform. Other researchers using the TPB have raised similar questions regarding what precisely perceived behavioral control is measuring and whether it is measuring a unidimensional construct (Chan & Fishbein, 1993; McCaul et al., 1993).

Apart from theoretical implications and limitations, the present study also provided insights for designing effective intervention strategies that can help a woman more effectively explore the advantages and disadvantages of both pregnancy resolution options. The most important result of this study is that women's intentions are primarily influenced by their attitudes about adoption and parenting. Issues related to the future

welfare of the child were of particular concern for women who raised their children. Specifically, they believed that not knowing how and if their child was being cared for was "bad" and "likely" to happen if they placed their child. Pregnancy counsellors who see unmarried women should take special care to explain all the options of a pregnancy decision; that is, counsellors should be knowledgeable and willing to discuss different types of adoption practices. For example, a large majority of adoption agencies are moving towards an open system of adoption whereby the birthmother actively participates in picking the families, in some cases meeting the adoptive families, and even continuing to have an ongoing relationship with the adoptive parents and the child. The strict implementation of a closed adoption (all records are sealed and there is no contact between birthmother and the child or the adoptive family) is becoming a less viable option as birthmothers are educated about other options. However, there still exist many misconceptions and myths about adoption practice that are potentially holding back some unmarried women from ever considering adoption as an option. Barth (1987) states that both the adolescent mother and the pregnancy counsellor may not have kept pace with current changes in adoption practice, thus perpetuating the negative aspects of adoption.

Using the same questionnaire employed in this study as an assessment tool could prove to be beneficial in a pregnancy counseling setting. Specific irrational beliefs could be identified for individual women and discussed in a therapeutic context or particular strengths could be examined and capitalized on. For example, a woman may have a

strong desire to continue with her education and have considerable support to do so from her family, but the women may also have serious concerns that she will never know or see how her child is doing again. A counsellor can use this opportunity to bring the family in as a unit to discuss the different options (i.e., open versus closed) of adoption and the advantages and disadvantages of parenting. Programs that provide counseling to families and unmarried pregnant teens are more likely to release their child for adoption (McLaughlin, 1989; Mech, 1986). Conversely a woman may have a naive idea about the permanency of adoption and the degree of openness that a particular agency and adoptive family are willing to accept. Again, identifying these beliefs is a large part of addressing and educating the women about all their options and the realities those options entail. It is hoped that the end result of this assessment and subsequent counseling would result in women feeling more confident in their decisions and thereby empowered.

Ajzen and Fishbein (1980) contend that " the ultimate determinants of any behavior are behavioral beliefs concerning its consequences and normative beliefs concerning the prescriptions of others" (p. 239). Consequently, to make any kind of change in a woman's pregnancy resolution behavior these primary beliefs need to be carefully examined. These beliefs should form the focus of any attempts to change the counseling procedures that are conducted for women making pregnancy related decisions. These changes should also be conducted in the hopes of improving the system for the women and the children involved and caution should be given not to use these beliefs as a

formulae to persuade or change a woman's mind against her will, but rather as a tool to identify areas of discussion and clarification.



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Table 1

Summary of Group Means Between  
Pilot and Experimental Groups

Characteristics	Group			
	Pilot (n=49)		Experimental (n=52)	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Age	18.5	2.6	18.6	4.5
SESa	68.9	27.8	75.0	26.8
Grade level	11.5	1.6	10.8	2.0

\*Computed using Hollingshead (1975) Two Factor Index; range = 20-120

Table 2

Summary of Means Between Women Who Raised and Women  
Who Placed Their Children for Selected Variables

Variables	Group			
	Placed (n=25)		Raised (n=25)	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
DIFF BI	4.04	3.39	-3.96	3.67***
DIFF ATT	1.10	2.17	-3.10	2.41***
DIFF SN	2.48	3.56	-2.52	3.87***
DIFF PBC	1.16	1.82	-1.58	1.87***
Age	19.2	4.12	17.3	3.12*
SES <sup>a</sup>	69.6	24.6	76.6	27.7
Grade level	11.3	2.13	10.3	1.72*
Adoption knowledge	1.43	.76	1.40	.77

\*  $p < .10$  (trend); \*\*\*  $p < .001$

<sup>a</sup>Computed using Hollingshead (1975) Two Factor Index; range = 20-120



Table 3

Descriptive Statistics and Zero-order Correlations BetweenSelected Variables

	Mean	SD	1	2	3	4	5	6	7
1. Behavior <sup>a</sup>	----	----	----						
2. Diff BI	-.12	5.30	.75***	----					
3. Diff ATT	-1.13	3.12	.69***	.87***	----				
4. Diff SN	-.14	4.43	.56***	.75***	.77***	----			
5. Diff PBC	-.31	2.31	.61***	.79***	.78***	.68***	----		
6. Age	18	3.72	.22	.41**	.29*	.13	.33*	----	
7. SES	74	26.4	-.14	-.26	-.34*	-.38*	-.32*	.15	----

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

<sup>a</sup>All correlations with behavior are point biserial.

Table 4

Descriptive Statistics and Zero-order Correlations between  
Estimates of Attitudes for Placing and Raising a Child  
With Other Selected Variables

	Mean	SD	1	2	3	4	5	6	7
1. Behavior <sup>a</sup>	----	----	----						
2. Diff BI	-.12	5.30	.75***	----					
3. Diff ATT	-1.13	3.12	.69***	.87***	----				
4. AD ESTATT <sup>b</sup>	8.89	30.8	.54***	.70***	.78***	----			
5. PR ESTATT <sup>b</sup>	22.50	26.1	-.69***	-.81***	-.83***	.69***	----		
6. Age	18	3.72	.22	.41**	.29*	.34*	-.47**	----	
7. SES	74	26.4	-.14	-.26	-.34*	-.37**	.17	.15	----

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

<sup>a</sup>All correlations with behavior are point biserial.

<sup>b</sup>Estimate measure of attitudes (ESTATT) (sum of the product between salient beliefs and outcome evaluations) for adoption (AD) and parenting (PR) related beliefs and evaluations.

Table 5

Descriptive Statistics and Zero-order Correlations Between  
Estimates of Subjective Norms for Placing and Raising a Child  
with Other Selected Variables

	Mean	SD	1	2	3	4	5	6	7
1. Behavior <sup>a</sup>	----	----	----						
2. DIFF BI	-.12	5.30	.75***	----					
3. DIFF SN	-.13	4.43	.56***	.75**	----				
4. DIFF ESTSN <sup>b</sup>	-7.17	32.3	.54***	.58***	.63***	----			
5. DIFF NORM <sup>c</sup>	-3.37	18.9	.67***	.79***	.91***	.69***	----		
6. Age	18	3.72	.22	.41**	.13	.11	.24	----	
7. SES	74	26.4	-.14	-.26	-.38*	-.38**	-.42**	.16	----

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

<sup>a</sup>All correlations with behavior are point biserial.

<sup>b</sup>Estimate measure of subjective norms (sum of the product between salient normative beliefs and motivation to comply). The ESTSN measure was calculated for both pregnancy choices (e.g., placing for adoption and parenting) and then the total for the adoption choice was subtracted from the total for the parenting choice resulting in the DIFF ESTSN.

<sup>c</sup>Differential salient normative beliefs measure (Total normative beliefs for the adoption choice was subtracted from the total normative beliefs for the parenting choice).

Table 6

Descriptive Statistics and Zero-order Correlations Between  
Estimates of PBC for Placing and Raising a Child with Other  
Selected Variables

	Mean	SD	1	2	3	4	5	6	7
1. Behavior <sup>a</sup>	---	---	---						
2. Diff BI	-.12	5.30	.75***	---					
3. Diff PBC	-.31	2.31	.61***	.79***	---				
4. AD ESTPBC <sup>b</sup>	-3.87	8.50	.48**	.50**	.59***	---			
5. PR ESTPBC <sup>b</sup>	-4.87	5.96	-.46**	-.57***	-.59***	-.41**	---		
6. Age	18	3.72	.22	.41**	.33*	.21	.06	---	
7. SES	74	26.4	-.14	-.26	-.32*	-.30*	.53**	.15	---

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

<sup>a</sup>All correlations with behavior are point biserial.

<sup>b</sup>Estimate measure of perceived behavioral control (ESTPBC) (sum of control beliefs) for adoption (AD) and parenting (PR).

Table 7

Summary of Hierarchical Regression Analysis for TPB VariablesPredicting Differential Behavioral Intentions

Variables	B	SE B	$\beta$	R <sup>2</sup>	$\Delta R^2$
<b>Hierarchical Regression #1</b>					
<b>Step 1</b>					
DIFF ATT	1.22	.185	.72***	--	--
DIFF SN	.172	.127	.20	--	--
Total				.77	.77
<b>Step 2</b>					
DIFF ATT	.943	.211	.56***	--	--
DIFF SN	.172	.127	.14	--	--
DIFF PBC	.588	.247	.26*	.79	.03
<b>Hierarchical Regression #2</b>					
<b>Step 1</b>					
DIFF ATT	1.06	.181	.63***	--	--
DIFF NORM	.09	.030	.31**	--	--
Total				.79	.79
<b>Step 2</b>					
DIFF ATT	.847	.204	.50***	--	--
DIFF NORM	.069	.030	.25*	--	--
DIFF PBC	.511	.243	.22*	.81	.02

\*p &lt; .05. \*\*p &lt; .01. \*\*\*p &lt; .001.

Table 8

Summary of Hierarchical Regression Analysis for TPB  
and Demographic Variables Predicting Differential

Behavioral Intentions

Variables	B	SE B	$\beta$	R <sup>2</sup>	$\Delta R^2$
<b>Hierarchical Regression #1</b>					
<b>Step 1</b>					
DIFF ATT	.943	.211	.56***	--	--
DIFF SN	.172	.127	.14	--	--
DIFF PBC	.588	.247	.26*	--	--
Total				.79	.79
<b>Step 2</b>					
DIFF ATT	.861	.202	.51***	--	--
DIFF SN	.234	.122	.20	--	--
DIFF PBC	.459	.239	.20	--	--
Age	.251	.096	.18*	.82	.03
<b>Hierarchical Regression #2</b>					
<b>Step 1</b>					
DIFF ATT	.847	.204	.50***	--	--
DIFF NORM	.069	.030	.25*	--	--
DIFF PBC	.511	.243	.22*	--	--
Total				.81	.81
<b>Step 2</b>					
DIFF ATT	.813	.194	.48***	--	--
DIFF NORM	.072	.029	.26*	--	--
DIFF PBC	.412	.235	.18	--	--
Age	.224	.091	.16*	.83	.02

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 9

Mean Behavioral Beliefs and Outcomes Evaluations  
for Women Who Placed Their Child For Adoption<sup>a</sup> and  
Women Who Raised<sup>b</sup> Their Child

Beliefs	Behavioral cross-product		Outcome evaluation		Behavioral belief	
	AD	PR	AD	PR	AD	PR
<b>About Placing for Adoption</b>						
Not being able to watch my baby grow up	-1.36	-3.20	-1.68	-2.36*	0.52	1.52
Finishing school and achieving future life goals	6.60	2.24**	2.64	2.48	2.24	0.76**
Not knowing if my child is being loved and cared for	0.20	-2.36**	-1.80	-2.76***	-0.48	0.76*
Not having your biological mother while growing up	-0.68	-3.72***	-0.48	-1.52***	1.76	2.28
Having a mother and father	7.68	2.40***	3.00	2.08**	2.56	1.40*
Feeling emotionally upset and depressed	-0.68	-5.08**	-1.80	-2.20	1.00	1.92*
Not knowing where you come from	1.04	-1.84*	-1.00	-1.72*	-1.36	0.20**
<b>About Raising</b>						
Having financial security	-3.68	4.12***	2.80	2.56	-1.32	1.44**
Having a baby to love and care for	1.96	7.68***	1.88	2.72***	0.88	2.76***
Watching my baby grow up	3.60	7.88***	1.96	2.84**	1.32	2.72**
Quitting school to get a job	-2.16	3.56***	-2.12	-1.76	0.60	-1.72**
Knowing that my child is being treated well	3.64	8.32**	2.72	2.92	1.40	2.84***
Having someone to love me	2.28	6.80***	2.12	2.72*	0.84	2.24**
Having to give up things I enjoy doing	-1.60	0.44	-0.76	0.44**	1.56	1.32

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

<sup>a</sup>Labelled as AD,  $n=25$ . <sup>b</sup>Labelled as PR,  $n=25$ .

Table 10

Mean Normative Beliefs for Women Who Placed Their  
Child For Adoption<sup>a</sup> and Women Who Raised<sup>b</sup> Their Child

Normative Beliefs	AD	PL
<b>About Placing for Adoption</b>		
Mother	1.04	-0.72*
Father	1.44	-1.08**
Baby's father	0.72	-1.72***
Family	1.52	-1.04***
Church	0.60	-0.88**
Friends	0.12	-1.88**
<b>About Raising</b>		
Mother	-1.04	0.92**
Father	-1.40	1.20***
Baby's father	-0.52	1.60**
Family	-1.12	1.24**
Church	-0.28	0.64*
Friends	-0.04	2.08***

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

<sup>a</sup>Labelled as AD,  $n=25$ . <sup>b</sup>Labelled as PR,  $n=25$ .



Table 11

Mean Control Beliefs for Women Who Placed Their  
Child For Adoption<sup>a</sup> and Women Who Raised<sup>b</sup> Their Child

Control Beliefs	AD	PL
<b>About Placing for Adoption</b>		
Having future information about how my child is doing	1.48	-0.04**
Spending a lot of time with my baby after he/she is born	-0.56	-1.32
Meeting the adoptive family in person	1.20	0.20
Carrying the child for nine months	-0.76	-2.36**
Having the support of my family	1.56	0.04**
Having ongoing contact with my child	0.24	-0.88*
Not knowing how my child is doing	-1.36	-2.00
Not having my families support	-1.48	-1.80
<b>About Raising</b>		
Not having financial support form the baby's father	-1.88	-1.28
Having a stable job	0.72	1.52
Having support from my family	1.12	2.08**
Not being mature enough	-1.88	-1.96
Getting married	-0.68	-0.24
Not having enough education	-2.36	-1.52*
Having a place of my own	-0.32	1.28**
Not having enough money	-2.52	-2.23

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

<sup>a</sup>Labelled as AD,  $n=25$ . <sup>b</sup>Labelled as PR,  $n=25$ .

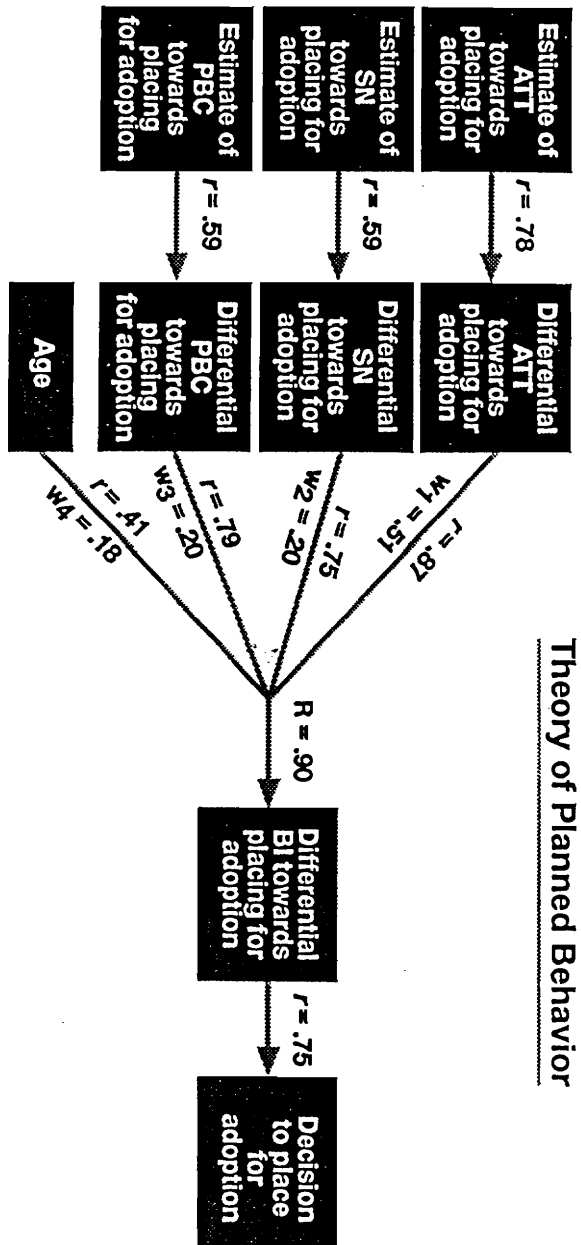


Figure 1. A schema of regression analysis results for Theory of Planned Behavior

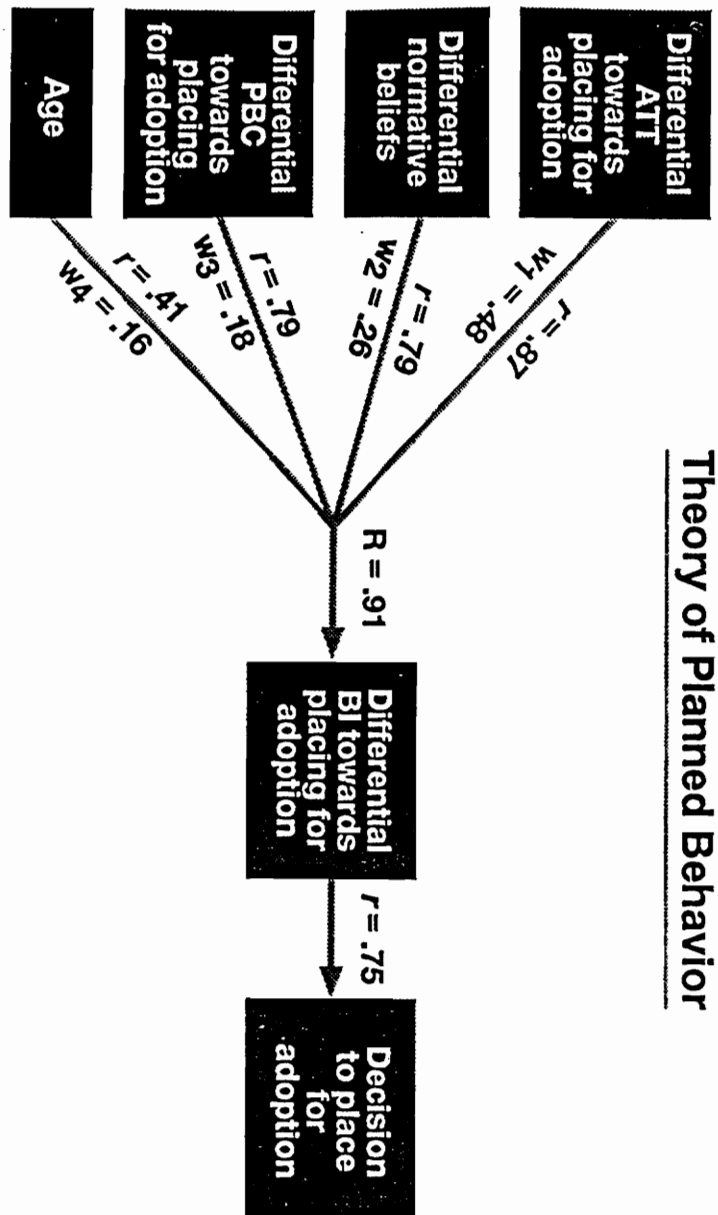


Figure 2. Revised schema of regression analysis results for Theory of Planned Behavior-Normative beliefs substituted for subjective norms

**Appendices**

**A-Elicitation Stimulus Directions**

**B-Elicitation Informed Consent**

**C-Adoption Elicitation Questionnaire**

**D-Parental Elicitation Questionnaire**

**E-TPB Questionnaire**

**F-Personal Information Questionnaire**

**G-Pregnancy/Adoption Questionnaire**

**H-Stimulus Directions**

**I-Statement of Informed Consent**

**J-Abbreviated TPB**

## Appendix A Elicitation Stimulus Directions

Read the study introduction to the women. Make sure the women understand that the study is anonymous and that they will be paid \$5.00 for participating. If they decide to participate have them read and sign the consent form before answering the questions. Also, determine if the women can read or not. If not, please read the questions to them. If you have to read the questions, make sure to read them verbatim. I would prefer if you could administer the questionnaires while the women are at the agency. I am afraid if you give them the questionnaires to fill out and take home they will not complete them. If this happens I will have no way of recontracting the women. The payment will be made through the agency who will forward the money on to the birthmother after they have completed the questionnaires.

### Study Introduction

We have a graduate student (who happens to be an adoptee) from Virginia Tech, Psychology Department who is collecting some information for his master's thesis degree paper in child psychology. Charles is interested in learning about the decision process involved in making a life plan for a child. Currently, very little is known about how women make choices when it comes to raising or placing a child. It is important to learn more about this decision so that improvements can be made to the laws, agency procedures, and attitudes of the general public about pregnancy-resolution issues. Charles's study involves you filling out three short questionnaires about your feelings and attitudes about raising or placing a child. There are no right or wrong answers to the questions. This study is anonymous; that is, your name will never be used to identify you with the information that you provide. You will receive \$5.00 for your time and effort. You will also be asked to sign a consent form agreeing to participate in the study. The consent form is for your own safety and does not commit you to any other studies or procedures. The answers you provided to these questions will help Charles construct a questionnaire that will then be used in a future study. Thank you very much.

Read after they have signed the consent  
and are ready to fill out the questionnaires.

Answer the following questions as thoroughly as possible to the way you are feeling right now about your current pregnancy. Remember your name will not be connected to these questions in anyway.

## Appendix B Elicitation Informed Consent

### Purpose

The purpose of this study is to find out about a woman's feelings and attitudes towards placing a child for adoption and raising a child on your own, who influences that decision and what things make it easier or harder to choose one or the other. This information will provide researchers and agencies with a better understanding of how to improve services for women and children involved in the adoption process.

### Procedure

All that is required of you is to fill out three questionnaires that will take about 15-20 minutes to complete. You will also give information about your age, marital status, education, ethnic group and past history of pregnancies.

### Confidentiality

This study is anonymous, that is, your name will not be connected to or used to identify your answers in any way, nor will the data that you fill out be given to the agency that you are currently attending. You are free to withdraw from completing the questionnaire at anytime.

### Compensation

For participating in this study you will receive \$5.00 in compensation that will be paid upon the return of the completed questionnaires to the investigator.

### Use of Data

All the data that is collected will be used for scientific and educational purposes. It may be presented at scientific meetings and/or published and reproduced to professional journals or books, or used for any purpose that Virginia Tech's Department of Psychology considers proper in the interest of education, knowledge, and research.

This research project has been approved by the Human Subjects Committee of the Department of Psychology.

I have read and understand the above description of the study. I hereby acknowledge the above and give my voluntary consent for participation in this study. I further understand that if I participate I may withdraw at any time without penalty. I understand that if I should have any questions regarding this research and its conduct, I should contact any of the persons named below.

Primary Researcher:	Charles S. Gulotta	Phone: (703) 552-7728
Advisor:	Jack W. Finney, Ph.D	Phone: (703) 231-6670
Chair, HSC:	Robert J. Harvey, Ph.D	Phone: (703) 231-7030
Provost, IRB:	Ernest R. Stout, Ph.D.	Phone: (703) 231-9359

Subject's Signature:	_____	Date: _____
Witness:	_____	Date: _____

**Appendix C  
Adoption Elicitation Questionnaire**

- 1. What do you believe are the advantages of placing this child for adoption?**
- 2. What do you believe are the disadvantages of placing this child for adoption?**
- 3. List the people or groups who would approve of your decision to place this child for adoption.**
- 4. List the people or groups who would disapprove of your decision to place this child for adoption.**
- 5. List all the things that would make it easier for you to place this child for adoption.**
- 6. List all the things that would make it harder for you to place this child for adoption.**
- 7. What else do you associate with placing this child for adoption?**

**Appendix D  
Parental Elicitation Questionnaire**

- 1. What do you believe are the advantages of raising this child yourself?**
- 2. What do you believe are the disadvantages of raising this child yourself?**
- 3. List the people or groups who would approve of your decision to raise this child yourself?**
- 4. List the people or groups who would disapprove of your decision to raise this child yourself?**
- 5. List all the things that would make it easier for you to raise this child yourself.**
- 6. List all the things that would make it harder for you to raise this child yourself.**
- 7. What else do you associate with raising this child yourself?**





Code #: \_\_\_\_\_  
 TPB Adoption Questionnaire

I intend to place my baby for adoption after I deliver in the next few months.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

## I.

Placing my baby for adoption after I deliver in the next few months is

rewarding \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: punishing  
 extremely quite slightly neither slightly quite extremely

unpleasant \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: pleasant  
 extremely quite slightly neither slightly quite extremely

harmful \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: beneficial  
 extremely quite slightly neither slightly quite extremely

good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

## II.

1. Having financial security and many opportunities in life for my baby is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

2. Not being able to watch your baby grow up is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

3. Finishing school and achieving future life goals that I have set for myself is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

4. Not knowing if my child is being loved or cared for is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

5. Having a loving and stable home for my child is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

6. Not having your biological mother while growing up is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

7. Having a mother and father for my baby is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely
8. Feeling emotionally upset and depressed is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely
9. Not knowing where you come from is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

## III.

1. Placing my baby for adoption after I deliver in the next few months would provide him/her with financial security and many opportunities in life.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely
2. Placing my baby for adoption after I deliver in the next few months would deny me the chance to watch my baby grow up.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely
3. Placing my baby for adoption after I deliver in the next few months would allow me to finish my schooling and achieve my future life goals.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely
4. Placing my baby for adoption after I deliver in next few months would not allow me to know if my child is being loved and cared for in the future.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely
5. Placing my baby for adoption after I deliver in the next few months would reassure me that my child will have a loving and stable home to live in.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely
6. Placing my baby for adoption after I deliver in the next few months would deny my child to be raised by his/her biological mother.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely
7. Placing my baby for adoption after I deliver in the next few months would insure that he/she will have a mother and father.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

8. Placing my baby for adoption after I deliver in the next few months will cause me to be emotionally upset and depressed.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

9. Placing my baby for adoption after I deliver in the next few months will deny my child knowledge about where he/she came from.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

IV.

Most people who are important to me think I should place my baby for adoption after I deliver in the next few months.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

V.

1. My mother thinks I should place my baby for adoption after I deliver in the next few months.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

2. My father thinks I should place my baby for adoption after I deliver in the next few months.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

3. The baby's father thinks I should place my baby for adoption after I deliver in the next few months.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

4. My family thinks I should place my baby for adoption after I deliver in the next few months.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

5. My church thinks I should place my baby for adoption after I deliver in the next few months.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

6. Most of my friends think I should place my baby for adoption after I deliver in the next few months.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

VI.

1. Generally speaking, I want to do what my mother thinks I should do.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

2. Generally speaking, I want to do what my father thinks I should do.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely
3. Generally speaking, I want to do what the baby's father thinks I should do.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely
4. Generally speaking, I want to do what my family thinks I should do.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely
5. Generally speaking, I want to do what my church thinks I should do.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely
6. Generally speaking, I want to do what my friends think I should do.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely

## VII.

How much control do you have over placing your child for adoption in next few months.

in \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: out of  
control extremely quite slightly neither slightly quite extremely control

For me to place my baby for adoption after I deliver in the next few months is

easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
extremely quite slightly neither slightly quite extremely

If I wanted to, I could easily place my child for adoption after I deliver in the next few months.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely

## VIII.

1. Having future information about how my child is doing will make it  
easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
extremely quite slightly neither slightly quite extremely  
for me to place my baby for adoption after I deliver in the next few months.
2. Spending a lot of time with my baby after he/she is born will make it  
easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
extremely quite slightly neither slightly quite extremely  
for me to place my baby for adoption after I deliver in the next few months.
3. Meeting the adoptive family in person will make it  
easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
extremely quite slightly neither slightly quite extremely  
for me to place my baby for adoption after I deliver in the next few months.

4. Carrying the child for nine months will make it  
 easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
 extremely quite slightly neither slightly quite extremely  
 for me to place my baby for adoption after I deliver in the next few months.
5. Having the support of my family will make it  
 easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
 extremely quite slightly neither slightly quite extremely  
 for me to place my baby for adoption after I deliver in the next few months.
6. Having ongoing contact with my child will make it  
 easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
 extremely quite slightly neither slightly quite extremely  
 for me to place my baby for adoption after I deliver in the next few months.
7. Not knowing how my child is doing will make it  
 easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
 extremely quite slightly neither slightly quite extremely  
 for me to place the baby for after I deliver in the next few months.
8. Not having my families support will make it  
 easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
 extremely quite slightly neither slightly quite extremely  
 for me to place the baby for after I deliver in the next few months.

## TPB Parent Questionnaire

I intend to raise my baby after I deliver in the next few months.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

## I.

Raising my baby after I deliver in the next few month is

rewarding \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: punishing  
 extremely quite slightly neither slightly quite extremely

unpleasant \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: pleasant  
 extremely quite slightly neither slightly quite extremely

harmful \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: beneficial  
 extremely quite slightly neither slightly quite extremely

good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

## II.

1. Having financial security and many opportunities in life for my baby is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

2. Having a baby to love and care for is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

3. Watching my baby grow up is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

4. Quitting school to get a job is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

5. Knowing that my child is being treated well is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

6. Having someone to love me is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

7. Having to give up things that I enjoy doing is  
 good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
 extremely quite slightly neither slightly quite extremely

## III.

1. Raising my baby after I deliver in the next few months would provide my baby with financial security and many opportunities in life.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely
2. Raising my baby after I deliver in the next few months would allow me to love and care for him/her.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely
3. Raising my baby after I deliver in the next few months would allow me to watch him/her grow up.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely
4. Raising my baby after I deliver in the next few months would force me to quit school to get a job.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely
5. Raising my baby after I deliver in the next few months would ensure me that my child is being treated well.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely
6. Raising my baby after I deliver in the next few months would provide me with someone who loves me.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely
7. Raising my baby after I deliver in the next few months would force me to give up things that I enjoy doing.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

## IV.

Most people who are important to me think I should raise my baby after I deliver in the next few months.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

## V.

1. My mother thinks I should raise my baby after I deliver in the next few months.  
 likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely



2. My father thinks I should raise my baby after I deliver in the next few months.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely
3. The baby's father thinks I should raise my baby after I deliver in the next few months.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely
4. My family thinks I should raise my baby after I deliver in the next few months.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely
5. My church thinks I should raise my baby after I deliver in the next few months.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely
6. Most of my friends think I should raise my baby after I deliver in the next few months.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely

## VI.

1. Generally speaking, I want to do what my mother thinks I should do.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely
2. Generally speaking, I want to do what my father thinks I should do.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely
3. Generally speaking, I want to do what the baby's father thinks I should do.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely
4. Generally speaking, I want to do what my family thinks I should do.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely
5. Generally speaking, I want to do what my church thinks I should do.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely
6. Generally speaking, I want to do what my friends think I should do.  
likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely

## VII.

How much control do you have over raising your child in the next few months

in control \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: out of control  
 extremely quite slightly neither slightly quite extremely

For me raising my baby after I deliver in the next few months is

easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
 extremely quite slightly neither slightly quite extremely

If I wanted to, I could easily raise my child after I deliver in the next few months.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
 extremely quite slightly neither slightly quite extremely

## VIII.

1. Not having financial support from the baby's father will make it  
 easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
 extremely quite slightly neither slightly quite extremely  
 for me to raise my baby after I deliver in the next few months.
2. Having a stable job will make it  
 easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
 extremely quite slightly neither slightly quite extremely  
 for me to raise my baby after I deliver in the next few months.
3. Having support from my family will make it  
 easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
 extremely quite slightly neither slightly quite extremely  
 for me to raise my baby after I deliver in the next few months.
4. Not being mature enough will make it  
 easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
 extremely quite slightly neither slightly quite extremely  
 for me to raise my baby after I deliver in the next few months.
5. Getting married will make it  
 easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
 extremely quite slightly neither slightly quite extremely  
 for me to raise my baby after I deliver in the next few months.
6. Not having enough education will make it  
 easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
 extremely quite slightly neither slightly quite extremely  
 for me to raise my baby after I deliver in the next few months.

7. Having a place of my own will make it  
 easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
 extremely quite slightly neither slightly quite extremely  
 for me to raise my baby after I deliver in the next few months.
8. Not having enough money will make it  
 easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
 extremely quite slightly neither slightly quite extremely  
 for me to raise my baby after I deliver in the next few months.

## Personal Information Questionnaire

Code #: \_\_\_\_\_

Age \_\_\_\_\_ Birth date: \_\_\_\_\_

Grade in school or last grade completed \_\_\_\_\_

## Ethnic Origin

 African-American caucasian hispanic native-american other, specify: \_\_\_\_\_

## Religion:

 Catholic Protestant Jewish other, specify: \_\_\_\_\_Do you currently have a job?  Yes  No If yes, occupation? \_\_\_\_\_Who do you currently live with?  parents  boyfriend  relative  other, specify: \_\_\_\_\_Do you have medical insurance?  Yes  NoIf yes, specify:  private  Medicaid  HMO  other, specify: \_\_\_\_\_Do you receive any other kind of government assistance?  Yes  No

If yes, specify: \_\_\_\_\_

For your current pregnancy have you received any prenatal care?  Yes  No

If yes, how often? \_\_\_\_\_

From whom:  private practice  health department  other, specify: \_\_\_\_\_

## Parent Information

Your Mother's Education level (check highest level)      Your Father's Education level (check highest level)

 < 7th grade Junior High (7th to 8th grade) some high school high school graduate some college or specialized training college graduate graduate school < 7th grade Junior High (7th to 8th grade) some high school high school graduate some college or specialized training college graduate graduate school

Mother's occupation if any?: \_\_\_\_\_

Father's occupation if any?: \_\_\_\_\_

Has your mother ever been divorced?  Yes  NoHas your father ever been divorced?  Yes  NoDo you have any brothers or sisters?  Yes  No If yes, How many? \_\_\_\_\_

Appendix G  
Pregnancy/Adoption Questionnaire

2Expected delivery date of your baby: \_\_\_\_\_

How many months pregnant are you? \_\_\_\_\_

Who will you live with after the baby is born?  alone  parents  boyfriend  relative  
 other, specify: \_\_\_\_\_

Will you seek government assistance after the baby is born?  Yes  No

What is your martial status?  single  married  divorced  separated

Have you ever been pregnant before and carried the child to term?  Yes  No  
If yes, How many times? \_\_\_\_\_

Do you currently have any children that you are raising?  Yes  No  
If yes, How many? \_\_\_\_\_

Have you ever had an abortion?  Yes  No

Have you ever had a miscarriage?  Yes  No

Have you ever placed a child for adoption?  Yes  No

Do you know anyone who has placed a child for adoption?  Yes  No  
If yes, Who? (Mark as many that apply)  parent  sibling  relative  friend  
 other, specify: \_\_\_\_\_

Do you know anyone who is adopted? (Mark as many that apply)  parent  sibling  relative  
 friend  other, specify: \_\_\_\_\_.

Was your current pregnancy planned?  Yes  No

Did you have a reason for wanting to get pregnant?  Yes  No  
If yes, What was the reason? \_\_\_\_\_

Where you using a form of birth control when you got pregnant?  Yes  No  
If yes, What kind? \_\_\_\_\_

## Appendix H

### Stimulus Directions

To be included in the study women should be:

1. Single at the time of the current pregnancy.
2. In their second or third trimester of pregnancy.
3. Ages 15 and up.
4. Did not participate in the previous pilot work.

Read the study introduction to the women. Make sure the women understand that the study is confidential and that they will be paid \$10.00 for participating. Each questionnaire will have a corresponding envelope attached so that the women can place their completed questionnaires in the envelope before handing them back to the agency representative. However, the women should be reminded that the consent form should stay with the agency.

If they decide to participate have them read and sign the consent form before answering the questions. Also, determine if the women can read or not. If not, please read the questions to them. If you have to read the questions, make sure to read them verbatim. I would prefer if you could administer the questionnaires while the women are at the agency. I am afraid if you give them the questionnaires to fill out and take home they will not complete them. If this happens, I will have no way of recontacting the women. Finally there are two parts to the main questionnaire the adoption related questions and the parenting related questions. Have the women fill out both even if they have made a final decision about one of the options.

### Study Introduction

We have a graduate student from Virginia Tech, Psychology Department who is collecting some information for his master's thesis degree paper in child psychology. Charles is interested in learning about the decision process involved in making a life plan for a child. Currently, very little is known about how women make choices when it comes to raising or placing a child. It is important to learn more about this decision so that improvements can be made to the laws, agency procedures, and attitudes of the general public about pregnancy-resolution issues. Charles's study involves you filling out several questionnaires about your feelings and attitudes about raising or placing a child. There are two parts to the main questionnaires. The first part will ask you about questions relating to adoption, and the second part will be questions about parenting your child. Please fill out both sections even if you have made up your mind on a particular option.

There are no right or wrong answers to the questions. This study is anonymous; that is, your data will not be linked with your name. To insure your anonymity a number will be used as a reference on the questionnaire and the consent form. The investigator will only receive the questionnaire, and the consent will be filed with the current agency. After the birth of your child the investigator will recontact your agency and refer to the number on the consent form to find out the final outcome of your pregnancy decision. Your identity and name will never be accessed or revealed to the investigator at any time.

You will receive \$10.00 for your time and effort. You will also be asked to sign a consent form agreeing to participate in the study. The consent form is for your own safety and does not commit you to any other studies or procedures. If you are uncomfortable about answering any questions you may skip them. Some women may be asked to fill out an abbreviated version of the questionnaire about a week later. Thank you very much for your time and effort.

Read after they have signed the consent

Answer the following questions as thoroughly as possible to the way you are feeling right now about your current pregnancy. Remember your name will not appear on any of these questionnaires. After completing your questionnaire please place it in the already self-addressed stamped envelope. Remember to give your agency representative your consent form.

**Appendix I**  
**Statement of Informed Consent**  
**Agency Keep For Your Files**

Code #: \_\_\_\_\_

**Purpose**

This study is being conducted by Charles Gulotta a graduate student in psychology at Virginia Tech as part of a requirement for his doctoral degree. The purpose of this study is to find out about a woman's feelings and attitudes towards placing a child for adoption and raising a child on your own, who influences that decision and what things make it easier or harder to choose one or the other. This information will provide researchers and agencies with a better understanding of how to improve services for women and children involved in the adoption process.

**Procedure**

All that is required of you is to fill out two questionnaires (One about your intentions towards adoption and the other about your intentions towards parenting) that will take about 30-40 minutes to complete. You will also be asked to give information about your age, marital status, education, ethnic group and past history of pregnancies. In some cases participants may be asked to fill out some additional questionnaires that will be similar to what has already been discussed. Finally, after the birth of your baby your agency will be recontacted to find out the result of your pregnancy decision.

**Confidentiality**

This study is anonymous, that is, your name will not be used on any forms concerning your data. Your consent form will be kept with the agency that is representing you. Your data will be coded by numbers, so that the investigator will be able to recontact the agency after the birth of your baby to find out the result of your decision. The investigator will have no way of personally identifying you with the information you provide without going through your agency first.

**Compensation**

For participating in this study you will receive \$10.00 in compensation that will be paid upon the return of the completed questionnaires to the investigator.

**Freedom to Withdraw**

You are free to withdraw from completing the questionnaire at anytime without penalty. If you chose to withdraw, you will be compensated for the portion of the time of the study you were able to complete. Moreover, if you are uncomfortable with answering a particular question you may skip that question, however, make a note that you are doing so.

**Approval of Research**

This research project has been approved, as required by the Institutional Review Board for projects involving human subjects at Virginia Polytechnic Institute and State University, by the Department of Psychology.

**Subject's Permission**

I have read and understand the above description of the study. I hereby acknowledge the above and give my voluntary consent for participation in this study. I further understand that if I participate I may withdraw at any time without penalty. I understand that if I should have any questions regarding this research and its conduct, I should contact any of the persons named below.

Primary Researcher:	Charles S. Gulotta	Phone: (703) 552-7728
Advisor:	Jack W. Finney, Ph.D	Phone: (703) 231-8027
Chair, HSC:	Robert J. Harvey, Ph.D	Phone: (703) 231-7030
Provost, IRB:	Ernest R. Stout, Ph.D.	Phone: (703) 231-9359

Subject's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Witness signature: \_\_\_\_\_ Date: \_\_\_\_\_

Appendix J  
Abbreviated TPB  
Code #: \_\_\_\_\_

I intend to place my baby for adoption after I deliver in the next few months.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely

## I.

Placing my baby for adoption after I deliver in the next few months is

rewarding \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: punishing  
extremely quite slightly neither slightly quite extremely

unpleasant \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: pleasant  
extremely quite slightly neither slightly quite extremely

harmful \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: beneficial  
extremely quite slightly neither slightly quite extremely

good \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: bad  
extremely quite slightly neither slightly quite extremely

## II.

Most people who are important to me think I should place my baby for adoption after I deliver in the next few months.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely

## III.

How much control do you have over placing your child for adoption in next few months.

in \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: out of  
control extremely quite slightly neither slightly quite extremely control

For me placing my baby for adoption after I deliver in the next few months is

easy \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: difficult  
extremely quite slightly neither slightly quite extremely

If I wanted to, I could easily place my child for adoption after I deliver in the next few months.

likely \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: unlikely  
extremely quite slightly neither slightly quite extremely



**CURRICULUM VITAE**

**Charles S. Gulotta**  
103 Sherwood Court  
Blacksburg VA 24060  
(703) 552-7728

**EDUCATION**

Masters of Science, November of 1994  
Clinical Psychology  
Virginia Polytechnic Institute and State University

Bachelor of Arts, May 1989  
Major: Psychology Minor: Religious Studies  
Catholic University of America  
G.P.A. 3.3

**EXPERIENCE**

**Clinical**

Graduate Clinician - August 1992 - April 1994  
Psychological Service Center and Child Study Center  
Virginia Polytechnic Institute and State University  
3110 Prices Fork Road  
Blacksburg, VA 24060  
231-6914

Supervisors: Dr. Richard Eisler  
1993-1994 Ms. Peg Warren, MS

Supervisors: Dr. Jack W. Finney  
1992-1993 Dr. Robert S. Stephens

Duties included outpatient counseling and assessment,  
psychological testing, participation on practicum team, and  
weekly supervision.

Psychology Practicum Externship - May - August 1994  
Department of Behavioral Psychology  
The Kennedy and Krieger Institute

707 N. Broadway  
Baltimore, Maryland 21205  
(410)-550-3100  
Supervisor: Dr. Gina Richman

Duties include family assessment, family system interventions, participation in research meeting and training seminars, research protocol implementation, and weekly individual supervision.

School Counselor - September 1993 - May 1994

Blacksburg Middle School  
Blacksburg VA 24060  
951-5716

Supervisor: Dr. Tom Ollendick. October 1993-present.

Provided weekly individual counseling services for emotional disturbed children in the Blacksburg public school; participation in a social skills group; attend bi-weekly group supervision meetings and monthly staff meetings.

Psych Technician - August 1988 - May 1989

Redl House, Residential Treatment Program for ED Boys  
6300 Muncaster Hill Road, Rockville, MD.  
(301) 258-8405

Supervisor: Dr. Tom Holman.

Structured time and activities for six emotionally disturbed boys, ages 7-12; Employed Redl's "life-space interview technique" as a therapeutic tool, and restraint techniques; made behavioral contracts and summary reports.

Camp Counselor - Summer 1988

Camp Greentree  
2600 Hayden Drive  
Silver Spring, MD.  
(301) 649-5309.

Director: Larry Smith, M.S.W.

Counselled children with wide range of emotional disturbances: conduct disorder, dissociative states, depression, and anxiety disorders. Organized daily play activities and conducted group therapy sessions.

Hotline Counselor - January 1987 - December 1987

D.C. Hotline  
Hotline P.O. Box 57194  
Washington, D.C. 20037.  
(202) 223-0020  
Supervisor: Julie Nathanson.

Worked in crisis intervention with wide range of callers; issues varied from personal relationships to border personality patients, drug abuse, suicide potentials, and teenage pregnancy. Participated in 35 hours of training in therapeutic listening techniques (reflective listening).

**Teaching**

Graduate Teaching Assistant - August 1994 - Present

Department of Psychology  
Virginia Polytechnic Institute and State University  
Blacksburg, VA 24060  
(703) 231-5938  
Supervisor: Dr. Robin Cooper

Instructor of advanced developmental lab course.

Graduate Teaching Assistant - August 1993 - May 1994

Department of Psychology  
Virginia Polytechnic Institute and State University  
Blacksburg, VA 24060  
(703) 231-6279  
Supervisor: Michael Casey

Instruct lab sessions of introductory psychology course.

**Research**

Thesis Research - January 1993 - Present

Department of Psychology  
Virginia Polytechnic Institute and State University  
Blacksburg, VA 24060  
(703) 231-6670  
Chairperson: Dr. Jack W. Finney

Designed and conducted a study investigating an application of the Theory of Planned Behavior for a young woman's pregnancy decision to raise or place her child for adoption.

Research Assistant- August 1992 - Present

Department of Psychology  
Virginia Polytechnic Institute and State University  
Blacksburg, VA 24060  
(703) 231-6670  
Supervisor: Dr. Jack W. Finney

Assisted primary professor in analysis of data. Assisted other faculty and graduate students in data collection, administration of structured interviews and data analysis.

Clinical Research Assistant - January 1989 - July 1992

National Institute of Mental Health, Child Psychiatry Branch  
1200 Rockville Pike  
Bethesda, Maryland  
(301) 496-6070  
Supervisor: Dr. Judith L. Rapoport.

Assisted primary investigator in all phases of research projects on attention-deficit hyperactivity disorder, conduct disorder and Tourette Syndrome including study design and manuscript writing. Performed statistical analysis. Administered computerized attentional tasks. Assisted during lumbar punctures and blood studies.

Research Assistant - August 1987 - May 1989

Marriage and Family Study Group, Life Cycle Institute  
Catholic University of America

Washington, DC.

(202) 319-5750

Supervisors: Dr. Cliff Notarius and  
Dr. David Pellegrini

Assisted experimenters with interviewing process of family and couple interactions. Prepared and operated video and audio equipment for lab interactions and transcribed videotaped couple and family interactions.

**HONORS**

Dean's List, Catholic University of America, 1987-1989

Psi Chi, National Psychology Honor Society

**PROFESSIONAL ACTIVITIES**

American Psychological Association, Student affiliate

Association for Advancement of Behavior Therapy

**TECHNICAL RESEARCH SKILLS**

Data Analysis

Proficient use in a number of statistical and data management software including SAS, BMDP, EPISTAT, Harvard Graphics, and Dbase,

**PUBLICATIONS**

Castellanous, X., Elia, J., Kruesi, M., Gulotta, S. C., Metford, I., Potter, W., Ritchie, G., Rapoport, L. J. (1994). Cerebral spinal fluid monoamine metabolites in ADHD boys. Psychiatric Research, 52, 305-316.

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- Castellanos, X., Elia, J., Gulotta, C. S., & Rapoport, J. L. (May, 1992). Stimulant treatment of pediatric Tourette's Syndrome and ADHD. Proceedings of the 145th Annual Convention of the American Psychiatric Association. Washington, DC.
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Harrison A. K., Richman, S. G., Gardner, J. A., Efron, A. L., Gulotta, S. C., Hayes, R., Henion, A. K., Vittemberga, G., Zaldo, C. (1994, November). A comparison of child-focused vs. family-focused treatment approaches for child noncompliance. Poster session presented at the 28th annual meeting of AABT, San Diego.

Jaquess, L. D., Harrison A. K., Efron, A. L., Gardner, J. A., Gulotta, S. C., Henion, A. K., Soeken, L. E., Richman, S. G. (1994, November). Micro versus macro measures of family functioning. Poster session presented at the 28th annual meeting of AABT, San Diego.

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Available upon request

**SIGNATURE:**