# The Intergenerational Transmission of Sexual Frequency

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#### Abstract

Intergenerational relationships are one of the most frequently studied topics in social demography. Within the area of family, researchers have found intergenerational similarity in family behaviors such as marriage, divorce, and fertility, with fertility being one of the most extensively studied intergenerational linkages. Yet virtually no research has examined the intergenerational aspects of a key proximate determinant of fertility: sexual frequency. We use the National Survey of Families and Households (NSFH) to examine the relationship between sexual frequency of parents and the sexual frequency of children when adults. We link parental sexual frequency in 1987/1988, when children were ages 5-18, to the sexual frequency of the children in 2001-2003 when these grown children were ages 18-34. We find significant associations between parental and adult children sexual frequency. A mechanism behind this association appears to be earlier transition to marriage among children of parents with high sexual frequency.

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## Introduction

Intergenerational relationships are one of the most frequently studied topics in the social sciences, including social demography. Prior research studies have shown strong and consistent links between characteristics of the parental generation and the same characteristics in children. These links have been examined in domains as varied as educational achievement (Bauer et al. 2007; De Graaf 200; Kalmin 1994), occupational attainment (Biblarz 1997; Korupp et al. 2002; Rytina 1992), political affiliation (Achen 2002; Dalhouse & Frideres 1996; Peterson 2006; Trevor 1999), religion (Copen & Silverstein 2007; Crockett & Voas 2006; Kulik 2005), gender attitudes (Moen et al. 1997; Pi-Ling Fan et al. 2000; Starrels 1992), delinquency (Hagan & Parker 1999; Hazani & Nahari 2003; Thornberry et al. 2003), health (Goodwin 2008; Harvey et al.1991; Landman-Peeters 2008; Wickrama et al. 1999), and family behaviors. Within the area of family behaviors, researchers have found intergenerational similarity in family formation behaviors such as age at marriage (Larson et al. 1998; Poppel et al. 2008; Thornton 1991) and divorce (Amato 1996; Feng et al. 1999; Teachman 2002; Wolfinger 1999).

The intergenerational topic that arguably has received the most attention is fertility (Barber 2001; Murphy & Knudsen 2002; Pluznhikov 2007; Reher et al. 2008). Researchers as early as the statistician Karl Pearson were interested in the correlation between family sizes across generations (Pearson and Lee 1899). Many mechanisms have been proposed for the similarity of fertility in parental and child generations, including the desire of children to reproduce their own family to that of their family of origin size, the transmission of family size

preferences, or the transmission of socioeconomic factors (education, wealth) that constrain or promote fertility similarly in both generations.

The study of intergenerational fertility linkages, however, suffers from a deficiency that also characterizes much of fertility research in general: demographers write voluminously about fertility, but almost nothing about sex (Watkins 1993). Sexual intercourse is a necessary precursor to fertility, and it is one of fertility's proximate determinants (Bongaarts 1978). Yet variations in sexuality, whether it be the type of sexual practices or the level of sexual frequency, is virtually absent from most fertility research (Watkins 1993). An exception is the literature on teenage childbearing, but even within this literature the focus usually remains on sexuality as a risk factor (Dixon-Mueller 1993). While the intergenerational aspect of proximate determinants such as marriage and union formation, contraception, spontaneous abortion (Pouta et al. 2005), and menarche (Pouta et al. 2005) has been studied, sexual frequency remains unexamined. Some encouraging work is beginning to examine the intergenerational component of sexual initiation (Cooksey and Mott 2008; Johnson and Tyler 2007), but these works' focus is not on sexual frequency.

Our research also addresses a gap in the literature by examining the linkages across generations in sexual frequency. Our work speaks to multiple literatures. First, our research has relevance to the fertility literature and the potential transmissible aspect of an understudied proximate determinant. Second, our research also contributes to the broader field of intergenerational relationships and similarity of behaviors and attributes of parents and children. Our aim in this paper is to examine not only if an intergenerational link in sexual frequency exists, but also to investigate potential mechanisms through which this intergenerational

transmission is achieved. To empirically test our hypotheses, we use multiple waves of the National Survey of Families and Households (NSFH) that span 15 years.

## **Theoretical Issues**

There are several good reasons to expect a link between parents' sexual frequency and the sexual frequency of their adult children: spuriousness, genetic inheritance, and social modeling.

Spuriousness is simply that any observed correlation between parental and adult child sexual frequency is not causal, but rather is the result of some third influence that is affecting both parental and adult child behaviors. Although it is almost impossible to completely rule out spuriousness in observational social science research, it can be minimized by including all theoretically relevant controls. We draw upon prior literature that has studied sexual frequency. For example, prior research has found that there are significant differences in sexual frequency by religious affiliation (Call, Sprecher, and Schwartz 1995). Because religious affiliation of parents is a strong determinant of children's religion, there are strong reasons to control for religious affiliation in our model in order to guard against spuriousness. In addition to religion, we include in our models variables that have previously been shown to be correlated with sexual frequency and that may have an intergenerational component.

In contrast to spurious explanations, one causal argument of the intergenerational transmission of sexual frequency is genetics. Many attributes and behaviors in humans have been found to have genetic components, and sexual behavior may also have heritable aspects that are passed on from parents to children. In a study of adoptive and non-adoptive sibling pairs, Bricker et al. (2006) found mixed support for a genetic influence on age of sexual initiation. In a twin

study, (Bailey et al. 2000) saw a significant genetic component in sexual behavior. From the study of DNA, other researchers have suggested a genetic component to specific aspects of sexuality, including sexual frequency (Hamer 2002; Pattatucci 1998). Ben Zion et al. (2006) examined polymorphisms (common genetic variations) in dopamine D4 receptors and found that subjects with a specific genotype had significantly higher levels of sexual desire and function. Halpern et al. (2007), however, found no association between polymorphisms in dopamine D4 receptors and the number of sexual partners in the last year for a sample of young adults. Halpern et al. (2007) did, however, find a significant association between polymorphisms in dopamine D2 receptors and the number of sexual partners. Although these genetic components to sexual behavior are clearly important and will yield important answer in the future, genetic mechanisms are not the focus of our paper, and we do not address these possibilities or discuss them further.

The causal argument that we develop in this paper relates to social modeling and social learning. Although older research viewed sexuality primarily as a biological force, newer research conceptualizes sexuality as something learned and modeled (Hogben and Byrne 1998). This learning happens early in the life course. Even by the time children are 3 or 4 years old, they have learned important issues relating to sexuality, such as touching, holding, and exposing of the body (Darling and Hicks 1982). Most of this learning is not direct, but indirect and via non-verbal communication (Darling and Hicks 1982; Yarber & Greer 1986). Although much of this research literature comes from the fields of psychology and communication, demographers frequently have incorporated these ideas and logical connections into their work. For example, Upchurch et al. (1999) argue that adolescent sexual activity is greatly influenced by the family because it is a primary location of social learning and role modeling. A common argument in the divorce literature is that children of divorced parents know their parents are dating and having

pre-marital sex, the children model this behavior, and as a result the children have higher levels of "permissiveness" (Thornton and Camburn 1987).

We, too, adopt a social learning framework to link parental sexual frequency, when children are young, to the sexual frequency of these children when they are adults. We do not mean to imply, however, that children observe their parents having sex or even know what their parents' sexual frequency is. As expected, research shows that even adult children find it hard to "think of their parents as sexual beings" (Pocs and Godow 1977). But if social learning is a relevant framework for guiding many demographic studies on sexual behavior and intergenerational influences, it is necessary for these linkages to be explicitly examined.

We propose three mechanisms through which sexual frequency may be transmitted from parents to adult children: union formation, fertility, and family attitudes. Union formation is marriage and cohabitation. If parental sexual frequency is high and adult children aspire to reach similar levels, then they may be more likely to enter marriages and cohabitations. First, prior research shows that the highest sexual frequency is for married and cohabiting individuals because these people have ready access to a sexual partner. Second, although pre-marital sex in the United States is common, there are still widespread norms against it (Horne 2004). Many individuals believe that a formal union, such as marriage, is necessary to legitimize sexual activity.

The second mechanism is fertility. Although reproduction is not the only reason individuals engage in sexual frequency, it is often a motive. Prior research on the relationship between sexual frequency and fertility is not complex: although the presence of young children (ages 0-4) in the household tend to be associated with less sexual activity compared to childless individuals, older children in the household (ages 5-18) are associated with higher sexual

frequency than childless individuals (Call, Sprecher, and Schwartz 1995). The decrease associated with young children is likely due to the time constraints involved in raising young children. The increase in sexual frequency with older children is not clear, but it may be associated with pro-natalist tendencies. In other words, people who have more children have more sexual intercourse. Therefore, the adult children's fertility may be the link between their sexual frequency and their parents' sexual frequency.

The third mechanism is pro-family attitudes. Above, we suggested that higher sexual frequency might be associated with fertility as an expression of pro-natalist values. Similarly, sexual frequency might also be associated with other pro-family values, such as marriage. Parents with high sexual frequency might transfer to their children values that reinforce family formation, such as the benefits of marriage or expectations of marriage.

## **Data and Methods**

*Data.* We test our hypotheses with data from three waves of the National Survey of Families and Households (NSFH). The NSFH is a nationally representative study of households in the United States fielded in 1987/1988 (wave 1), 1992-1994 (wave 2), and 2001-2003 (wave 3). In wave 1, respondents with children had one of their children randomly selected as a "focal child." Focal children had additional information collected about them in wave 1. In wave 2, the focal children themselves were briefly interviewed. In wave 3, when the focal children had become adults, they were administered an extensive individual interview. Sexual frequency was measured in both the parent wave 1 interview and the adult child wave 3 interview. Throughout the waves, a rich set of sociodemographic controls and mechanisms was also measured at the

parent and child level. In short, the research design and the temporal ordering of measurement is ideal for the study of the intergenerational transmission of sexual frequency.

*Dependent variable*: Adult Child's Sexual Frequency. The adult children were asked if they were sexually active, and if so, "About how many times have you had sexual intercourse over the last 30 days?" This number varies from 0 to a maximum of 30 (the highest category was capped at 30 or more). Respondents who were not sexually active were assigned 0 times in the last 30 days.

Independent variables. The primary independent variable of interest is the parent's sexual frequency, which was asked in the first wave of the NSFH in 1987/1988. Its question wording is similar to the adult child's sexual frequency question. Although the parent question was not capped at a maximum of 30 times in the last month, we truncate responses greater than 30 in order to keep identical measures for both parents and children. The other independent variables of substantive interest are the proposed mechanisms linking parental and adult child sexual frequency: union formation, fertility, and marital expectations. Union formation is the adult child's union status at the most recent survey (2001-2003): married, single, or cohabiting. Fertility is the number of children the adult child has had, as of the 2001-2003 survey. The measure of marital expectations, which is measured at NSFH 2 in 1992-1994, is a scale in response to the question, "How do you feel about getting married someday? Would you say that you definitely don't want to, probably don't want to, probably want to, or definitely want to get married?" This is recoded on a 1 to 4 scale, with higher values representing greater expectations for marriage. Although the question was asked slightly differently depending on if the child was a younger (age 10-17 at interview) or older (age 18-24 at interview) focal child, the measures are generally comparable.

*Controls.* We control for several variables at both the parent and adult child level. Parent controls include gender, age, education, family income, marital status, race and ethnicity, and religion. All of these variables were measured at the first wave of the NSFH in 1987/1988. In coding gender, females were assigned 1, males 0. Age, education, and family income were continuous variables. Marital status was coded into three categories: married, cohabiting, and not married (single, divorced, widowed, or separated). In the analysis, married is the reference group. Race and ethnicity was coded into non-Hispanic White, Black, Hispanic, and other. Religion coding follows the categories outlined by Lehrer and Chiswisk (1993) and includes mainline Protestant, conservative Protestant, Catholic, Jewish, Mormon, other religion, or no religion. At the child level, controls include gender, age in 2001-2003, whether or not the child pursued any education after high school (1 if higher education was pursued, 0 otherwise), and the child's number of siblings. Further revisions of the paper will add additional controls, including employment and income. Race and ethnicity, as well as religion, are not controlled at the child level due to the strong inheritance of these characteristics from parents to child. Because race, ethnicity, and religion is controlled at the parent level, it is likely that this variation is accounted for in these parent variables. Further analyses, however, will test this assumption and check if results change when including the same child measures.

*Methods.* We use linear regression to estimate the relationships between the predictor variables and adult children's sexual frequency. To address problems of missing data, we use multiple imputation techniques. Listwise deletion, even in the case of data missing completely at random, is inefficient, and simple mean substitution can lead to biases and misleading results because it artificially reduces variability in the data and does not recognize the uncertainty in the imputed values (Allison 2002). In a multiple imputation approach, several likely yet different

versions of a complete dataset are created (in our analysis, 5 versions are created), and each is analyzed using complete-data methods. The results of these separate analyses are then combined. The combined estimates and significance statistics properly reflect the variability and uncertainty in the imputed data, and the estimates are unbiased when the methodological assumptions are met. One of the most important assumptions is that the data are missing at random (MAR), conditional on the observed data. In other words, the missingness mechanism is not related to any unmeasured characteristics not included in the imputation model. The MAR assumption is not testable, but the assumption is strengthened by including all relevant predictors in the imputation model.

Our modeling strategy is a nested model approach. We first estimate a model with control variables and our primary predictor of interest: parental sexual frequency. Parental sexual frequency is measured at NSFH wave 1, and thus is causally prior to the adult child's sexual activity. We then add to this model, one at a time, potential intervening mechanisms that might explain this relationship: adult children's union formation, family attitudes, and fertility. These adult child activities happen after NSFH wave 1, but before NSFH wave 3, and thus they intervene between parental and adult children's sexual frequency. If coefficients for parental sexual frequency decrease when these adult child variables are added, it is consistent with the explanation that these variables explain or mediate the relationship.

# Results

# (Table 1)

Table 1 shows the descriptive statistics of the sample. We do not discuss these descriptives in detail, but a few notable patterns exist. The mean sexual frequency in the parental

and adult child generation is quite similar: 7.56 times in the past 30 days for the adult children, and 7.12 times for the parents. This similarity is striking given the large age differences. Parents were on average 38 years old when their sexual frequency was measured, and the adult children were 25 years old. These are clearly different points in the life course. Only about 1/3 of the adult children had entered into marriage, yet almost <sup>3</sup>/<sub>4</sub> of the parents were married. Despite these different life circumstances, the difference in sexual frequency was only about .5 times per month.

#### (Table 2)

Table 2 presents the multivariate results. The dependent variable for the models in Table 2 is the adult child's sexual frequency, which was measured in 2001-2003 (NSFH wave 3). Model 1 tests if there is an overall association between parental and adult child sexual frequency, after including typical sociodemographic and relevant controls. The results suggest that there is a significant intergenerational relationship. For each increase in the parent's frequency of sexual intercourse in the past 30 days, the adult child's frequency of sexual intercourse increases by .09 times, or about 1/10 as much. Clearly, the magnitude of this coefficient is not large, but we stress the very long time span separating these two measures: as much *15 years*. The fact that any significant relationship, even if small, is found across such a large time span is notable.

In model 2, we begin to test potential mechanisms through which parental sexual frequency is transmitted to adult children. Model 2 adds two variables for union formation: currently married and currently cohabiting. Currently single is the reference group. Union formation has strong relationships with adult child sexual frequency. Adult children who are married report almost 6 additional events of sexual intercourse in the past 30 days compared to single adult children. Cohabitation has an even bigger effect: cohabitors report 7 more events of

sexual intercourse compared to singles. Furthermore, it appears that union formation mediates a substantial portion of the intergenerational influence of parental sexual frequency. The coefficient for parental sexual frequency is no longer significant, and compared to model 1, the magnitude of the coefficient is reduced by 43% (.051 is 43% less than .089).

In model 3, the adult child's fertility is added to the model. Fertility has a significant relationship with sexual frequency: for each child ever born, the respondent's sexual frequency in the past 30 days is increased by about .8 events. This suggests that, as hypothesized, higher fertility respondents have higher sexual frequency. Fertility, however, is not a mediator of parental sexual frequency. The coefficient for parent's sexual frequency is unchanged in model 3 compared to model 1.

In model 4, the adult child's marital expectations are examined as a mediator. Marital expectations, which were measured at NSFH2 in 1992-1994, are significantly associated with sexual frequency at NSFH3 in 2001-2003. Yet as was the case with fertility, marital expectations is not a mediator of parental sexual frequency, which remains significant in model 3 and of nearly the same magnitude as it was in model 1.

Finally, model 5 examines all three mechanisms in the same model. The coefficients for union formation (marriage and cohabitation) are essentially unchanged in model 5. The coefficient for fertility is greatly reduced in model 5 and is no longer significant. This result is probably because fertility is highly correlated with being in a union (marriage or cohabitation). Thus model 5 shows that there is no independent effect of the adult child's fertility, but rather it is union status that is the mediator. The coefficient for marital expectations, while significant in model 5, is reduced slightly compared to model 4, probably due to its correlation with the

formation variables. In sum, the results suggest that union formation is the most important intergenerational mechanism linking the sexual frequency of parents and adult children.

#### Discussion

Although intergenerational relationships are frequently the topic of study, the intergenerational aspect of sexual frequency has received very little research attention. This is especially surprising given the importance of sexual frequency as a proximate determinant of fertility and the wealth of research devoted to the intergenerational transmission of fertility preferences and behaviors.

Our work examined these gaps in the existing research literature. Our contributions are both empirical and theoretical. Empirically, we showed that that despite a time span of up to 15 years, there are significant associations between parental sexual frequency and adult child sexual frequency many years later. These associations existed even after controlling for relevant sociodemographic characteristics of both the parents and adult children. Theoretically, we discussed several reasons why parent and adult child sexual frequency might be linked: spuriousness, genetics, and social learning. Although we cannot rule out spuriousness, a rich set of controls reduced this possibility. Genetic influence is clearly important, and early research in this area shows promise, but this pathway is beyond the scope and data available in this analysis. Our contribution has been to explore three social learning mechanisms through which parents may transmit tendencies in sexual frequency to their adult children: union formation, fertility, and family attitudes.

Although all three of the mechanisms had significant associations with the adult children's sexual frequency, only the children's union formation is clearly identified as an

intervening mechanism. The evidence is consistent with an interpretation that parents with higher sexual frequency have adult children who enter unions, both marriages and cohabitations, at higher rates. Because individuals in unions have more ready access to sexual partners, these adult children then have higher sexual frequency than similar young adults not in a union.

Although we already use social learning theory as a base for our hypotheses, we believe a further examination of this literature, and how it has been used in the study of intergenerational family behaviors, will prove very useful. Not only will it strengthen our arguments, but it may also suggest additional mechanisms for empirical investigation. We believe we can add to our current mechanisms of union formation, fertility, and family attitudes. For example, we have one single family attitude (marital expectations), but the extensive measurement in the NSFH surveys will allow us to incorporate more comprehensive measurement. In the future, we will also be able to examine complexities and contingencies in intergenerational transmission. The intergenerational literature suggests that parent-child relationships have important moderating roles: parents may be more effective at passing on behaviors and attitudes when they have positive relationships with their children, as opposed to poor or high conflict ones. We can examine this possibility by estimating interaction models of parent-child relationships. The credibility of our social learning argument would be enhanced if the link between parent and adult child sexual frequency were stronger for parents and children with more positive relationships.

And finally, as our work relates to broader research in sexuality, investigating the potential intergenerational transmission of other sexual behaviors and processes, such as sexual schemas, may lend more insight to sexual function and well-being. Our work suggests that there is merit in investigating the long-term influence of the intergenerational transmission of sexual

behaviors. Sexual frequency has been linked with sexual self schemas and ideologies (Andersen and Cyranowski 1994, Andersen et. al 1999). As sexuality is not simply a biological function, but also something that is socialized, there is potential for the development of sexual attitudes and schemas that are not conductive to positive sexual outlook. Parents influence the development of these attitudes in their children through both verbal and nonverbal direct and indirect communication (Darling and Hicks 1983). Such communication may not always convey positive messages about sexuality (Gagnon, 1965), and can leave a child with conflicting emotions regarding the topic. It is common that sexual dysfunctions are a result of the disagreement of what an individual would like to sexually participate in, and their socialized conception of what is appropriate (Nobre and Pinto-Gouveia 2006). Previous research has found that some common negative messages that parents may pass on to their children can include such things as, "sexuality is something that is dirty," "sex is scary," "sex is something meant for boys," and so on (Darling and Hicks 1983). The result of such negative messages during the socialization of sexual attitudes can frequently lead to dysfunctions of sexual desire, arousal, and orgasm in both males and females (Nobre and Pinto-Gouveia 2006). While some types of sexual dysfunction are more easily treated than others, most all require some form of cognitive remapping of the developed sexual ideals and attitudes, a process which can be very frustrating and involved (Hoyer et. al 2009). It is possible that the intergenerational transmission of sexual frequency may coincide with a transmission of sexual schemas. While our research does not investigate sexual schemas specifically, our research may help to inform other work.

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|  | Mean     | Std. Dev. |
|--|----------|-----------|
| Adult Child's Sexual Frequency in past 30 days (2001-2003) | 7.56     | 8.04      |
| Parent's Sexual Frequency in past 30 days (1987/1988)      | 7.12     | 6.38      |
| Adult Child Intervening Mechanisms                         |          |           |
| Union Formation  |          |           |
| Currently Single   | .51      | .50       |
| Currently Married  | .34      | .47       |
| Currently Cohabiting                                       | .15      | .36       |
| Fertility (Children ever born)                             | .68      | 1.02      |
| Marital Expectations (1992-1994) (1-4 scale)               | 3.43     | .70       |
| Adult Child Controls                                       |          |           |
| Female   | .54      | .50       |
| Age in 2001-2003   | 25.21    | 4.44      |
| Education After Highschool (1=Yes)                         | .68      | .47       |
| Number of siblings   | 2.66     | 2.13      |
| Parent Controls  |          |           |
| Female   | .65      | .48       |
| Age (1987/1988)  | 37.71    | 7.71      |
| Years Education  | 13.12    | 2.39      |
| Family Income (1987/1988)                                  | \$37,155 | \$40,392  |
| Marital Status (1987/1988)                                 |          |           |
| Married  | .72      | .45       |
| Cohabting  | .04      | .19       |
| Not Married  | .25      | .43       |
| Race & Ethnicity   |          |           |
| Non-Hispanic White   | .80      | .40       |
| Black  | .14      | .34       |
| Hispanic   | .05      | .22       |
| Other  | .01      | .10       |
| Religion   |          |           |
| Catholic   | .23      | .42       |
| Jewish   | .02      | .14       |
| Other  | .01      | .11       |
| Mainline Protestant  | .32      | .47       |
| Conservative Protestant                                    | .30      | .46       |
| Mormon   | .04      | .19       |
| None   | .08      | .27       |
|  |          |           |

Ν

|  | 1                  | 2                                | 3                   | 4                  | 5                                |
|--|--------------------|----------------------------------|---------------------|--------------------|----------------------------------|
| Parent's Sexual Frequency (1987/1988)                                | 0.089*<br>(2.494)  | 0.051<br>(1.517)                 | 0.089*<br>(2.536)   | 0.088*<br>(2.427)  | 0.051<br>(1.488)                 |
| Adult Child Intervening Mechanisms<br>Currently Married (ref=single) | Ϋ́,                | 5.749***                         | · · · ·             | ( , ,              | 5.580***                         |
| Currently Cohabiting (ref=single)                                    |                    | (12.800)<br>7.206***<br>(13.847) |                     |                    | (11.916)<br>7.180***<br>(13.795) |
| Fertility (Children ever born)                                       |                    | (13.047)                         | 0.822***            |                    | 0.082                            |
| Marital Expectations (1992-1994)                                     |                    |                                  | (0.701)             | 0.844**<br>(2.677) | 0.579*                           |
| Adult Child Controls   |                    |                                  |                     | ( )                | ( )                              |
| Female (ref=male)  | -0.016<br>(-0.041) | -0.773*<br>(-2.068)              | -0.240<br>(-0.611)  | -0.107<br>(-0.268) | -0.843*                          |
| Age in 2001-2003   | 0.153**            | -0.141*<br>(-2.516)              | 0.063               | 0.133*             | -0.154**                         |
| Education After Highschool (1=Yes)                                   | -0.297             | -0.058                           | -0.050              | -0.356             | -0.074                           |
| Number of siblings   | 0.081              | 0.022                            | 0.061               | 0.081              | 0.020                            |
| Parent Controls  | (0.010)            | (=====)                          | (0.000)             | (0.0017)           | (•)                              |
| Female (ref=male)  | 0.318              | 0.391                            | 0.449               | 0.297              | 0.379                            |
|  | (0.738)            | (0.963)                          | (1.042)             | (0.681)            | (0.921)                          |
| Age (1987/1988)  | -0.073*            | -0.043                           | -0.063*             | -0.072*            | -0.042                           |
| <b>C</b> ( )   | (-2.321)           | (-1.454)                         | (-2.007)            | (-2.269)           | (-1.418)                         |
| Years Education  | -0.219*            | -0.151                           | -0.177 <sup>*</sup> | -0.228**           | -0.155                           |
|  | (-2.479)           | (-1.821)                         | (-1.990)            | (-2.589)           | (-1.851)                         |
| Family Income (1987/1988)  | -0.009             | -0.008                           | -0.008              | -0.009             | -0.008                           |
| Marital Status (1987/1988) (ref=married)                             | (                  | (                                | (                   | (                  | (                                |
| Cohabting  | 0.678              | 0.556                            | 0.511               | 0.863              | 0.668                            |
| 3  | (0.625)            | (0.545)                          | (0.476)             | (0.783)            | (0.647)                          |
| Not Married  | 0.328              | 0.119 <sup>´</sup>               | 0.302               | 0.342              | 0.124                            |
|  | (0.654)            | (0.254)                          | (0.605)             | (0.688)            | (0.265)                          |
| Race & Ethnicity (ref=White)   | · · ·              | · · ·                            | . ,                 | , ,                | · · · ·                          |
| Black  | -1.671**           | 0.115                            | -1.662**            | -1.606**           | 0.122                            |
|  | (-2.771)           | (0.201)                          | (-2.775)            | (-2.685)           | (0.213)                          |
| Hispanic   | -0.181             | 0.141                            | -0.234              | -0.060             | 0.215                            |
|  | (-0.183)           | (0.152)                          | (-0.238)            | (-0.061)           | (0.233)                          |
| Other  | -1.080             | -0.695                           | -1.048              | -1.295             | -0.844                           |
|  | (-0.510)           | (-0.345)                         | (-0.496)            | (-0.610)           | (-0.419)                         |
| Religion (ref=Catholic)  |                    |                                  |                     |                    |                                  |
| Jewish   | 2.792*             | 2.557*                           | 2.912*              | 2.493              | 2.353                            |
|  | (2.051)            | (2.010)                          | (2.146)             | (1.821)            | (1.837)                          |
| Other  | -0.179             | -0.131                           | -0.466              | -0.230             | -0.183                           |
|  | (-0.102)           | (-0.080)                         | (-0.266)            | (-0.130)           | (-0.111)                         |
| Mainline Protestant  | 1.829***           | 1.572**                          | 1.757***            | 1.784***           | 1.539**                          |
|  | (3.499)            | (3.216)                          | (3.364)             | (3.412)            | (3.147)                          |
| Conservative Protestant  | 1.368*             | 1.202*                           | 1.199*              | 1.332*             | 1.172*                           |
|  | (2.413)            | (2.255)                          | (2.116)             | (2.344)            | (2.191)                          |
| Mormon   | -0.303             | -0.746                           | -0.649              | -0.494             | -0.879                           |
|  | (-0.300)           | (-0.782)                         | (-0.638)            | (-0.491)           | (-0.918)                         |
| None   | 2.177**            | 2.156**                          | 2.098**             | 2.257**            | 2.211**                          |
|  | (2.802)            | (2.971)                          | (2.709)             | (2.898)            | (3.039)                          |

| Intercept | 7.773*** | 10.642*** | 8.536*** | 5.567** | 9.084*** |
|-----------|----------|-----------|----------|---------|----------|
|           | (4.292)  | (6.121)   | (4.699)  | (2.841) | (4.903)  |
| Ν         | 1952     | 1952      | 1952     | 1952    | 1952     |

\*p<.05, \*\*p<.01, \*\*\*p<.001, two-tailed tests Z-statistics are in parentheses below regression coefficients