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Changes in Values Toward Individualism and Collectivism Among Young Adults

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Abstract

We use data from the National Longitudinal Study of Generations (LSOG) to explore how age, family background, and life course transitions alter individualistic and collectivistic values of young adults aged 16 to 35 in the year 2000 (n=451). We find that that these young adults had more individualistic values than their parents did when they were at the same age. Results from random and fixed effects models suggest that 1) young adults become increasingly collectivistic as they age; 2) parents' own values and marital and family behaviors influence the change in their children's values over time; and 3) young adults' life course transitions including college enrollment, college graduation, parenthood, marriage and cohabitation change their individualistic and collectivistic values over time.

Introduction

The transition from adolescence to adulthood involves a variety of experiences in school and the labor force, as well as the assumption of multiple adult roles. Forming a romantic partnership and entrance into parenthood are two examples of role transitions that shape the life pathways of young adults, both in the context in which they are experienced and in their ability to shape strategies of action, or beliefs about how the world works (Swidler, 1986). Research on the effects of values concerning marriage, cohabitation and parenthood focuses on how these values shape family formation behaviors, such as the timing of marriage and parenthood, as well as the decision to cohabit with a partner (Axinn & Thornton, 1993; Barber, 2000; Clarkberg, Stolzenberg & Waite, 1995). These studies show values influence the timing and context of life course transitions. However, the reverse association is less frequently studied--how transitions in young adulthood influence values. The study of how life transitions influence values is an important research question, particularly because values are responsive to experiences and life course transitions over time.

The current study has four specific aims. First, we examine whether young adults are more or less individualistic than previous generations. Several studies have charted the rise in individualistic and materialistic values among young adults in the United States from the 1970s to the late 1980s (Bellah, Madsen, Sullivan, Swidler & Tipton, 1985; Crimmins, Easterlin & Saito, 1991; Easterlin & Crimmins, 1991). However, the preoccupation with individual growth and self-fulfillment may have slowed in recent years. More recent studies have shown the trend toward increasing individualism has

declined among young adults in the 1990s (Bengtson, Biblarz & Roberts, 2002; Roberts & Bengtson, 1999). We reevaluate this question with more recent data.

Second, we assess how age influences values. Measuring the *independent* effect of age on values changes is a useful way to determine whether values change as a result of developmental processes, such as aging, the experience of life course transitions, or both. Since life course transitions often occur at specific ages, the effects of age and life events are analyzed separately to better understand the process of values change over the adult life course.

Several studies have shown that parental martial and family behaviors and values are associated with their children's behaviors and values (Amato & DeBoer, 2001; Cherlin, Kiernan & Chase-Lansdale, 1995; Cunningham & Thornton, 2006). Thus, our third aim is to evaluate whether parents' divorce, education, and own values and the number of siblings in the family is related to changes in young adults' values over time.

Last, we examine five transitions in young adulthood—college completion, college enrollment, marriage, cohabitation and parenthood—and explore how each of these life transitions changes values toward individualism and collectivism over time. The fourth study aim is important for understanding how the occurrence of life events and the adoption of new social roles influence values over the adult life course.

Values as a Driving Force of Demographic Change

For the purposes of this study, we define values as "enduring beliefs that a specific mode of conduct is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence" (Rokeach, 1973). Values are different from attitudes in that attitudes refer to a concrete social object, while values are more abstract

and are often placed more centrally in concepts of the self (Hitlin & Pillavin, 2004). Evidence suggests young adults' demographic transitions today are less socially prescribed by the family and wider society, and are more a product of individual preferences (South, 2001). These changes have shifted the life goals among young adults, many whom desire jobs high in monetary rewards and prestige, rather than careers that further the public good (Easterlin & Crimmins, 1991; Crimmins, Easterlin & Saito, 1991). Decisions to cohabit and/or marry a partner are also informed by a broader set of competing values, such as the value placed on individual achievement compared to broader social concerns, such as family life (Lye & Waldron, 1997). Values reflect one's life goals (Shanahan, 2000), and as such are important for understanding young adult transitions over the life course.

In particular, values about marriage have a direct relationship to values about other domains of life. For example, young adults who value career advancement and leisure time are more likely to cohabit than to marry (Clarkberg, Stolzenberg & Waite, 1995). Thus cohabitation and singlehood are often chosen by people who wish to avoid the constraints and demands of marriage. The increase in the pursuit of personal goals separate from family commitments has been one of the arguments made by those touting the decline of the collective functions and roles provided by the family (Popenoe, 1988; 1993). However, most young adults expect to marry and highly value family life (Casper & Bianchi 2002; Manning, Longmore & Giordano, 2007; Hill & Yeung, 1999). In this study, we explore if and how values change as a result of life course transitions, such as college completion, college enrollment, marriage, cohabitation and parenthood, keeping

in mind that values are fluid and can be reconstituted as one ages, and as one experiences life events within a particular time period.

Although young adults' values are influenced by their own life transitions, these values are first shaped by family experiences in childhood and adolescence. Studies have shown young adults whose parents divorce have less positive attitudes about marriage that children whose parents are continuously married (Axinn & Thornton, 1996). Parents' marital transitions have a strong influence on their children's attitudes and values toward marriage which influences children's values and union formation behaviors as young adults (Amato & DeBoer, 2001; Cherlin, Kiernan & Chase-Lansdale, 1995; Cunningham & Thornton, 2006). Given these findings, we include parental divorce in these analyses to assess the extent to which young adults' values toward individualism/collectivism are shaped by parents' own marital transitions.

Theories Used to Explain Attitudinal/Value Changes Over Time

Shifts in individual values over time can be attributed to two processes: developmental changes and role transitions. The 'impressionable years' hypothesis is often used to explain values changes as a result of developmental changes, such as aging (Alwin & Krosnick, 1991). This theory states individual's attitudes are malleable in young adulthood but become increasingly stable as people age. The majority of studies in this area measure sociopolitical, gender and sexual attitudes to determine whether changes are due to cohort succession or intracohort changes (Danigelis, Hardy & Cutler, 2007; Brooks & Bozendahl, 2004; Treas, 2002). On the one hand, although findings vary depending on the attitude considered, most studies find changes are due, in large part, to cohort succession: the movement of younger cohorts with attitudes rooted in distinct

historical context replacing the attitudes of older cohorts (Ryder, 1965). On the other hand, the receptivity of young adults to their environment makes them particularly likely to change their values, compared to older adults who are more resistant to change (Alwin, 2002; but see Danigelis et al, 2007).

The role transitions experienced by young adults are another avenue through which young adults experience values change. A large number of sociological studies have focused on the strategies with which people cope with role overload or the conflict and strain that ensues when roles compete for one's energy and time (Staff & Mortimer, 2007; Eggebeen & Knoester, 2001; Moen & Yu, 2000; Gerson, 1985). The adoption of adult roles, such as marriage and parenthood, results in a change in one's identity, depending on the salience of the particular role (Thoits, 1992). Similarly, marriage and parenthood, both independently and jointly, involve a reassessment of one's values.

In contrast, those who cohabit often have a different set of values compared to the married. On average, young adults who cohabit have less traditional attitudes toward family life. For example, cohabitors have more accepting attitudes toward divorce and have more egalitarian gender attitudes (Axinn & Thornton, 1996; Clarkberg, Stolzenberg & Waite, 1995; Cunningham, Beutel, Barber & Thornton, 2005; Thornton, Axinn & Hill, 1992). Young adults who cohabit are also less religious, often because religious institutions discourage cohabitation (Stolzenberg, Blair-Loy & Waite, 1995) and because young adulthood is a period of less religious conviction and participation (Uecker, Regnerus & Vaaler, 2007). Hence it is likely cohabitors have higher individualistic values because they have fewer family commitments and are less connected with

religious institutions. Our study tests whether young adults who cohabit without children are more individualistic than those who marry and/or have children.

Research Questions

The Rokeach Value Survey (1973) is a useful tool to explore value hierarchies and their perceived importance over the life course. The applicability of this survey has been explored, both for its measurement qualities and for its larger contribution to the study of values (Hitlin & Pilavin, 2004; Spates, 1983). Although the survey has been cited widely in social psychology and in cross-cultural studies, to our knowledge, no sociological study to date has used this survey to measure values changes in young adulthood in the United States. The Longitudinal Study of Generations (LSOG) is used to explore these questions, and its multigenerational and longitudinal design is particularly useful for the study of values changes over time. Specifically, we address four research questions:

1) Do young adults rank individualistic values as more important and collectivist values as less important than their parents at similar ages?
2) How do young adults' values toward individualism and collectivism change with age?
3) How do parental divorce, parents' education and parents' own values influence young adults' values toward individualism and collectivism?
4) How do college degree attainment, college enrollment, marriage, cohabitation and parenthood influence young adults' values toward individualism/collectivism?

Methods

Sample

The Longitudinal Study of Generations (LSOG) is a study of over 3,000 respondents ages 16-91, from 350 three- and four-generation families (Bengtson et al., 2002). Individuals eligible for sample inclusion were generated from the families of grandparents randomly selected in 1970 from the membership of a large (840,000 member) prepaid health maintenance organization in the Los Angeles area. The sample pool was generally representative of white, economically stable and working class families. Self-administered questionnaires were mailed to the grandparents and their spouses (G1s), their adult children (G2s) and their grandchildren who were aged 16 or older (G3s). In 1985, 1,331 of the original sample were surveyed again. Since 1991, data have been collected at three-year intervals: 1991, 1994, 1997 and 2000. Starting with the 1991 wave of data collection and continuing up to the present, great-grandchildren (G4s) were accumulated into the study as they turned 16 years of age. The response rate between 1971 and 1985 was 65%, and has averaged 74% between waves since then. In 2000, the response rate for G4s was 69%. There are 839 young adults who were interviewed in at least one of the four waves since 1991.

We used two sample criteria to select the subsample used in these analyses. We define young adulthood to include individuals between the ages of 16 and 35, referred to in the study as G4s. This age range follows closely other definitions of young adulthood which define this period of life between 18 to 30 years of age (Rindfuss, 1991). Nine individuals did not meet these criteria and were deleted from the sample. Second, only those young adults who participated in at least two waves of data can be included in the

sample. This is an important distinction because the main research aim of the study is to measure changes in values over time which requires at least two data points. Thirteen percent of the sample had participated in all four waves, 20 percent had participated in at least three waves, 24 percent had participated in at least two waves and 43 percent had participated in only one wave. Out of the 839 young adults who participated in at least one of these waves, 479 participated in at least two waves. The sample for analyses was further reduced to 451 once taking into account those young adults' who did not fill out the Rokeach Value Survey correctly (N=28).

Measures

Dependent Variable

For these analyses, we used eight items from the Rokeach Value Survey which measure values on individualism, on the one hand, and collectivism on the other. The full Rokeach Value Survey is a collection of 18 terminal values which respondents rank in order of importance or desirability in life (Rokeach, 1973). The subscales of individualism and collectivism each include four items and have been tested in previous studies using these data (Bengtson, Biblarz & Roberts, 2002; Bengtson & Roberts, 1999). The individualism scale includes: 1) an exciting life (novelty, adventure), 2) a sense of accomplishment (achievement), 3) personal freedom (independence, free choice, autonomy) and skill (being good at something you enjoy doing). The collectivism scale includes: 1) religious participation (working with others in your own church or organization); 2) friendship (meaningful relations with others who really care); 3) loyalty to your own (family and loved ones, church or group); and 4) patriotism (working for our country). The first two items in each scale were ranked in accordance to <u>importance</u> in

life; the last two were ranked according to desirability in life. These eight values were asked at each time wave. Phrases in parentheses were included alongside each value item to aid in the respondent's understanding of its meaning.

The purpose of these analyses is to determine the effects of age, family background and life events on individualism and collectivism. For these analyses, we coded the eight items so that positive coefficients represent a higher ranking of individualistic values and negative coefficients indicate a higher ranking of collectivistic values. Two additional items were added to the Rokeach scale in 1997 and 2000: career advancement (achieving success in your job or profession) and family life (working for the well-being of family members). We did not include these items in the analyses, but the range of the scales varies over time with the addition of these items. The range of these values is -8 to 8 in 1991 and 1994 and -9 to 9 in 1997 and 2000. To make these scales comparable over time, the scale values of "8" and "9" in 1997 and 2000 were collapsed to correspond with the values scale in earlier waves.

The five Rokeach value items measured of young adults and their parents are time-varying. This means that respondents evaluate their values for each wave in which they participated. Thus the dependent variable is interpreted as the change in individualism/collectivism associated with the change in the independent variables over time. The reliability coefficients for the individualism scale in 1991, 1994, 1997 and 2000 are .96, .93, .86 and .87, respectively. The reliability coefficients for the collectivism scale are .89, .86, .77 and .78 during the same years. Table 4.1 shows a correlation matrix for individualism and collectivism items in 2000 to illustrate the association among these items.

Table 4.1: Correlation Matrix for Items Included in the Individualism and Collectivism Scales Among Young Adults Ages 16-35, LSOG 2000 (N=451)†

	1	2	3	4	5	6	7	8
1) An exciting life	**1**	.56	.55	.56	-.02	.52	.43	.12
2) A sense of accomplishment	.56	**1**	.67	.77	.13	.65	.62	.32
3) Personal freedom	.55	.67	**1**	.66	.22	.74	.62	.34
4) Skill	.56	.77	.66	**1**	.27	.73	.63	.31
5) Religious participation	-.02	.13	.22	.27	**1**	.29	.47	.43
6) Friendship	.52	.65	.74	.73	.29	**1**	.75	.75
7) Loyalty to your own	.43	.62	.62	.63	.47	.75	**1**	.40
8) Patriotism	.12	.32	.34	.31	.43	.40	.47	**1**

†Each of these items is significantly different from 0 except for the correlation between "an exciting life" and "religious participation"

Independent Variables

We measure family background characteristics at the earliest wave in which these data are available. For G4s, the earliest wave is 1991 and for their parents, the G3s, it is 1985. Family background variables include whether at least one parent received a college degree (=1). To assess family structure in childhood, the question, "Did your parents ever divorce?" (1=Yes), asked of G4s, was also included. We include another variable to reflect family composition: the number of siblings reported by the focal child. We measure parents' values on individualism and collectivism scales from the earliest wave available. We code this variable in the same way as we coded young adults' individualism and collectivism scores. Variables which reflect young adult transitions include: 1) received college degree (=1) and 2) enrolled in school (but no terminal degree). Last, we included three measures of family formation, whether the G4 married (=1), cohabited (=1) or had a child (=1). Young adult transitions variables--college degree attainment, college enrollment, marriage, cohabitation and parenthood--are time-varying. This means the effects of the independent variable on the dependent variable

depend on whether an event occurred during a particular time interval. For example, young adults who reported being single in 1991 and married in 1994 would be coded as "0" in 1991 and "1" in 1994.

The Timing of Life Transitions Using the LSOG

The timing and sequence of such events are important when assessing values change. Date of current union formation was available, as well as the birth year of first and subsequent children born to young adults in the study. However, restricting the sample to those whose unions and/or births occurred between 1991 and 2000 further reduced the sample by 44 cases (N=407). This sample restriction was deemed unnecessary because young adults are only asked about their current union status and not the dates of entry and exit from each union experienced. Further, the date of college graduation was not asked in any time wave. Thus given these data limitations, we can only partially assess the temporality of whether life course events results in values changes, or changes in values results in the occurrence life course transitions.

Plan of Analysis

Fixed and random effects pooled time-series models are used to test the relationship between age and values toward individualism/collectivism. In a pooled time-series, respondents receive four records, one for each time of measurement. Pooled time-series techniques are necessary for this particular model so the effects of time-varying variables can be estimated. Random effects models are preferable to regression models with lagged dependent variables because age and period effects can be estimated in the same model (Allison, 1994). The random effects models assume the unobserved variation between individuals which is constant over time are random variables, as shown

in the equation: $Y_{it}=u + b_{it} + a_i + e_{it}$ where u is an overall constant, a_i is the constant effect for individual *i, b* is the effect of change on individual *i* in time period *t*, and e_{it} is a within-individual error term. Random effects models are often more efficient than fixed effects models because time-invariant variables (gender, birth cohort) can be included.

Fixed effects models hold the change between individuals over time constant, such that $a + (Y_{it} - Y_i)=b(X_{it} - X_i) + e_{it}$, where Y_i and X_i are means for individuals *i* across *t* waves. Because both the independent and dependent variables are expressed as the deviation from the individual's mean scores, they sum to zero for each individual and the constant term *a* is dropped from the equation. Although the fixed effects approach cannot include time-invariant variables, its ability to control for differences within individuals that often cannot be measured, such as personality characteristics or biological and genetic differences make this approach particularly useful (Johnson, 1995). The choice to use either random and/or fixed effect models depends on whether time-invariant variables need to be explicitly measured and whether the model is correctly specified. Both random and fixed effects models are shown here to compare differences between model estimates.

Results

Table 4.2 displays the descriptive characteristics for variables used in the analyses. With the exception of parents' education, parental divorce, parents' value on individualism/collectivism, number of siblings and young adults' gender, these variables are time-varying. In other words, the mean represents the average value across all time waves from which the data were available. Table 4.2 also provides a comparison of parents' and children's individualism/collectivism scores. Parents' mean

individualism/collectivism score is 1.37, which is lower than their children's score of 3.19. A t-test on this item shows the mean difference to be significant, suggesting young adults have significantly higher individualistic values than their parents over time (t=-4.91). Both parents and their children are highly educated. Approximately 45 percent of parents are college graduates and almost one-third of young adults received a college degree by the end of the study period. About 60 percent of young adults were ever enrolled in college. Over half of these young adults also had experienced parental divorce. On average, young adults grew up in small families with one or two siblings. Union and parenthood transitions are common among the sample. About 44 percent of these young adults had ever been married and 23 percent had ever cohabited. About 36 percent ever had children.

Table 4.3 shows the breakdown of marriage, cohabiting, childbearing and singlehood among young adults. Given the three-year intervals between surveys, it is likely, in some cases, a relationship may begin and end during the interval that is not captured in the data set. However, this table provides a useful description of the types of transitions formed among young adults, as well as the configuration of these unions for a small sample of young adults. Although most young adults report marriage and no cohabitation, about 20 percent of the sample reported cohabiting and marrying a romantic partner. The majority of married young adults report having children, but over one-third do not. The large number of married people without children is most likely a reflection of marriage in its early years before children are born.

Table 4.2: Means, Standard Deviations and Descriptions of Variables Used in Random and Fixed Effects Models Among Young Adults Ages 16-35, LSOG (N=479)

	Description	Mean	Valid N
Parents' Characteristics			
Parent individualism/ collectivism score	Parents' individualism/collectivism score[a]	1.37 (7.37)	455
College degree or higher	At least one parent received college degree or higher	.45 (.50)	462
Ever divorced	Asked of G4s: "Did your parents ever divorce?" (1=Yes)	.53 (.50)	479
Young Adult Characteristics			
Individualism/collectivism score	Young adults' individualism/ collectivism score[a]	3.19 (8.15)	451
Gender	1=Female	.58 (.49)	479
Age	Mean age Range is 16-35	22.5 (4.54)	479
Number of siblings	Reported number of siblings Range is 0-13	1.98 (1.53)	479
College degree or higher	Received a college degree or higher by end of the study period	.28 (.45)	470
Enrolled in college[b]	Enrolled in college, no degree by end of the study period	.59 (.49)	478
Married[b]	Married by end of study period	.44 (.50)	473
Cohabited[b]	Cohabited by end of study period	.23 (.42)	473
Have children[b]	Have children by end of study period	.36 (.48)	474

[a]The range for the Rokeach items is -32 to 32.

[b]These variables are presented here as the proportion of young adults ever experiencing these events.

Standard deviation in parentheses

Although many married couples do not yet have children, childbearing most often takes place within marital unions in this particular sample. Looking at young adults who cohabit with no reported marriages shows only a small number ever having children (N=18). Finally, this table shows there are a large number of single young adults. Over forty percent of the total sample does not report any union during the study period. However, 6 percent of these single young adults report having children. For these individuals, it may be the timing of the survey may have missed the short-lived romantic unions where children were present.

Table 4.3: Descriptive Statistics of Married, Cohabitating and Young Adults with Children, Ages 16-35, LSOG (N=451)

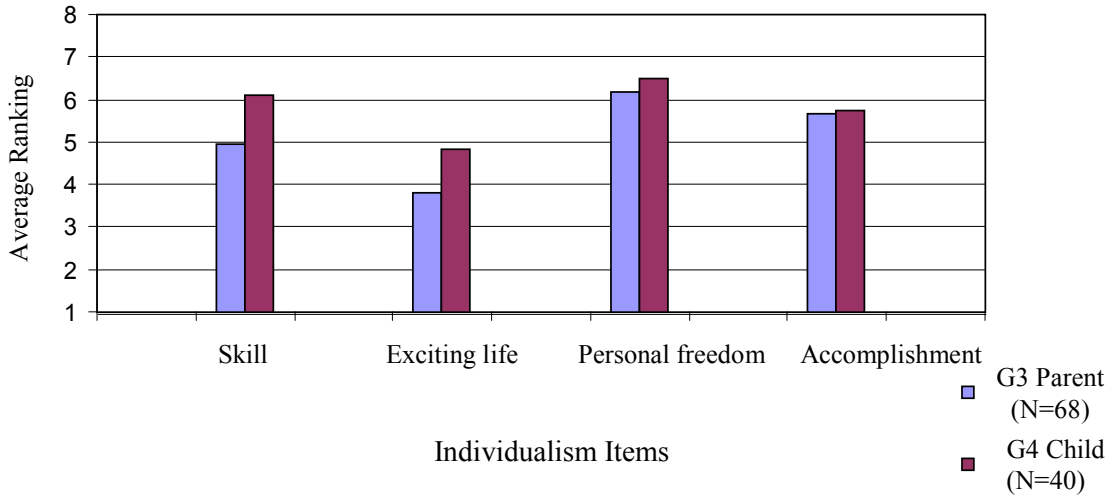
	Mean	N
Marriage Reported	.42	190
No cohabitation reported	.81	154
Cohabited	.19	36
No children reported	.33	62
Has children	.67	128
No Marriage Reported, Cohabited	.14	65
Cohabited, no children	.72	47
Cohabited, has children	.28	18
No Union Reported	.43	196
No children reported	.94	184
Has children	.06	12

Young Adults' and Parents' Values

The first research question asks whether young adults rank individualistic values higher than their parents at similar ages. Comparing parents in 1971 and young adults in 2000 at age 20 shows some interesting differences. By holding age constant, the

differences in ranked values can be compared across generations and over time. Figure 4.1 shows how the four items which make up the individualism scale are ranked between parents and their offspring. Each item on the individualism scale is significantly different between parents and young adults, though to varying degrees. Possessing a skill for something you enjoy doing shows the largest difference, with young adults ranking this as more desirable than their parents ($t=9.96$; $p<.01$). Having an exciting life is also ranked as significantly more important among young adults compared to their parents ($t=5.90$; $p<.01$).

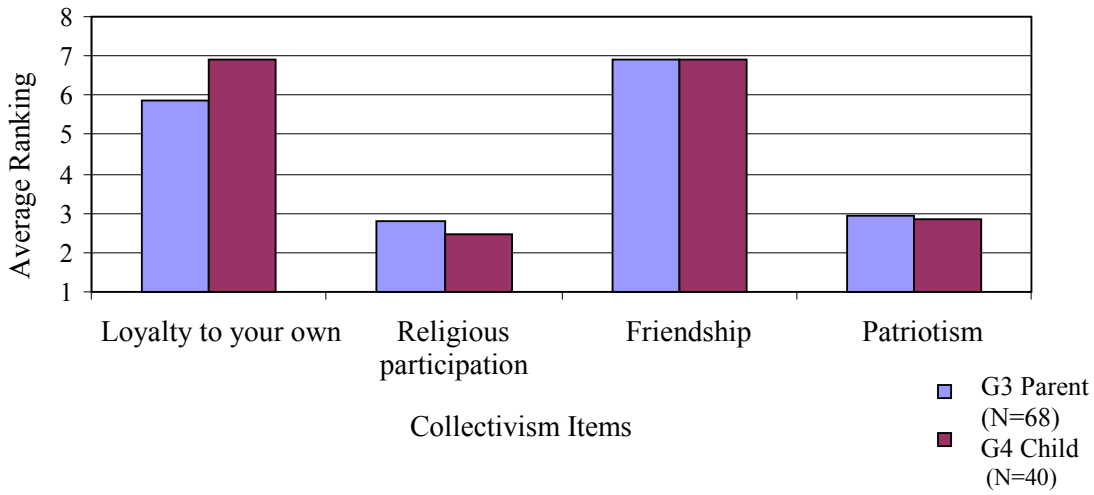
Figure 4.1: A Comparison of G3 Parents and G4 Children's Individualism Values at Age 20 in 1971 and 2000, LSOG



Similarly, personal freedom is ranked as more desirable among young adults ($t=2.32$; $p<.05$), followed by accomplishment where there is a slight increase in importance among young adults ($t=1.91$; $p<.10$).

Figure 4.2 displays the differences in ranking of the four items that comprise the collectivism scale. Interestingly, loyalty to your family and/or community is ranked as significantly more desirable among young adults compared to their parents thirty years earlier ($t=9.72$; $p<.01$). This finding replicates an earlier study using these data comparing parents in 1971 with their children in 2000 at average age 19 (Bengtson, Biblarz & Roberts, 2002; p. 44). The value attributed to the importance of religious participation, on the other hand, declined significantly among young adults compared to their parents ($t=2.27$; $p<.05$). There are no significant differences on the ranking of friendship and patriotism between parents and their offspring.

Figure 4.2: A Comparison of G3 Parents and G4 Children's Collectivism Values at Age 20 in 1971 and 2000, LSOG



There are two main findings attributed to these two figures. First, young adults possess values that are distinctly more individualistic than their parents at similar ages. An exciting life and the development of a skill for something one enjoys are important to

young adults, as is the autonomy to pursue one's interests. Despite the rise in self-oriented values, however, young adults are 'turning back' to family commitment and loyalty. Hence the rise in individualist values among young adults does not reduce the extent to which young adults' value family life.

Values Change Over Time

In line with the second research question, age variables were included in both random and fixed effects models to determine the extent to which values toward individualism/collectivism change with age and over time. The random effects model (Table 4.4) indicates young adults become less individualistic—and more collectivistic—over time. This trend is most significant for women whose values toward collectivism change at a faster rate than do men's values. This finding corroborates other research which shows women possess values with a higher collectivistic sentiment compared to men (Beutel & Marini, 1995). Gender is not controlled in the fixed effects model because it is a constant (Table 4.5). However, the significance of age in the fixed effects model suggests significant within-person change in individualistic and collectivistic values over time.

Family Background and Young Adults' Values

The third research question asks how parents' own individualistic/collectivistic values, parental divorce, parents' college education and number of siblings influences changes in young adults' individualistic/collectivistic values over time. Table 4.6 includes these background characteristics in a random effects model. In the random effects model, it is important to remember these coefficients take into account the variation between- and within-individuals. Similarly, the differences across groups (e.g.

young adults' whose parents divorce vs. those whose parents do not divorce) are assumed to be uncorrelated with the other covariates in the model (Johnson, 1995). This table

Table 4.4: Random Effects Regression Model Relating Age and Gender to the Change in Individualistic/Collectivistic Values Among Young Adults, Ages 16-35, LSOG

	M1	
Age	-.16	***
	(.05)	
Female	-1.45	**
	(.71)	
Constant	7.50	
Person-years	1,268	
N	451	

Standard errors in parentheses
***p<.001, **p<.05, *p<.10

Table 4.5: Fixed Effects Regresion Model Relating Age to the Change in Individualistic/Collectivistic Values Among Young Adults Ages 16-35, LSOG

	M1	
Age	-.14	**
	(.06)	
Constant	6.06	
Person-years	1,268	
N	451	

Standard errors in parentheses
***p<.001, **p<.05, *p<.10

highlights four important findings. First, parents with a high average value of individualism are likely to instill the same values in their children. Thus parents who rank individualistic values highly also have children who rank individualistic values as more important over time.

Table 4.6: Random Effects Regression Model Relating Age, Gender and Parental Characteristics to the Change in Individualistic/Collectivistic Values Among Young Adults Ages 16-35, LSOG

Age	-.19	***
	(.05)	
Female	-1.84	***
	(.67)	
Parents' individualistic/ collectivistic value	.30	***
	(.05)	
Parents' divorce	1.19	*
	(.69)	
At least one parent has college degree	.60	
	(.67)	
Number of siblings	-.59	**
	(.22)	
Constant	8.38	
Person-years	1,128	
N	451	

Standard errors in parentheses
***p<.001, **p<.05, *p<.10

The second important finding is young adults whose parents divorce and those whose parents are continuously married have significantly different patterns of value change. Young adults whose parents divorce develop more individualistic values over time. Third, young adults who grew up in larger families have higher collectivistic values. Fourth, age and gender remain important predictors of values changes with the addition of these family background variables. This indicates young adults rank collectivistic values higher with age, after controlling for characteristics of their family of origin. This finding provides evidence that values change in young adulthood as a result of developmental processes. The next step is to see whether age remains a significant predictor of value change once adding young adults' life course transitions to the model.

Table 4.7 is a random effects model which includes five life events--college degree attainment, college enrollment, marriage, cohabitation and parenthood--to determine the extent to which these life transitions change young adults' values. This table reveals six important findings. As shown in Model 1, young adults who are enrolled in college develop higher individualism scores over time. These findings make sense in light of three of the four values included in the individualism scale: personal accomplishment, freedom and skill. It is likely college-enrolled young adults would place high value on their accomplishments and skills. Similarly, young adults enrolled in college would also highly value the autonomy provided by higher education. This finding suggests college education increases young adults' individualistic values while holding age constant.

The second finding of this table is displayed in Model 1. Young adults who transition into marriage develop lower scores toward individualism—and higher collectivism scores—than those who do not marry. A similar finding is evident for young adults who transition into parenthood, as shown in Model 2. Young adults who have had children develop more collectivistic values than young adults who have not had children. This finding suggests marriage and parenthood induces a shift in values among young adults from individualism to collectivism.

Table 4.7: Random Effects Regression Models Relating Age, Gender, Parents' Characteristics and Young Adults' Life Course Transitions to the Change in Individualistic/Collectivistic Values Among Young Adults Ages 16-35, LSOG

	M1		M2		M3		M4		M5	
Parents' individualistic/ collectivistic value	.30 (.05)	***	.30 (.05)	***	.29 (.05)	***	.30 (.05)	***	.30 (.05)	
Parents ever divorce	1.26 (.66)	*	1.33 (.68)	*	1.27 (.67)	*	1.23 (.66)	*	1.16 (.66)	*
At least one parent has college degree	.08 (.66)		.17 (.68)		.24 (.67)		.14 .(.68)		.07 (.66)	
Young adult characteristics										
Age	-.09 (.06)		-.19 (.06)	***	-.20 (.06)	***	-.11 (.06)		-.08 (.07)	
Female	-1.83 (.65)	***	-1.80 (.66)	***	-1.82 (.65)	***	-1.85 (.65)	***	-1.80 (.65)	***
College degree or higher[a]	1.00 (.70)		.99 (.70)		.94 (.69)		.96 (.70)		.83 (.70)	
Enrolled in college[a]	.82 (.45)	*	.94 (.45)	*	.89 (.45)	*	.80 (.45)	*	.76 (.45)	*
Number of siblings	-.48 (.21)	**	-.54 (.22)	**	-.52 (.21)	**	-.48 (.21)	**	-.47 (.21)	**
Married[a]	-2.74 (.62)	***					-2.46 (.64)	***	-3.01 (.71)	***
Have children[a]			-.95 (.49)	*			-.37 (.51)		-1.79 (.97)	**
Cohabited[a]					2.07 (.70)	***	1.41 (.72)	**	1.51 (.72)	**
Married * Have children[a]									-1.87 (1.07)	*
Constant	6.31		7.97		8.06		6.55		6.13	
Person-years	1,128		1,128		1,128		1,128		1,128	
N	451		451		451		451		451	

[a]These variables are time-varying.
Standard errors in parentheses
***p<.001, **p<.05, *p<.10

It is important to distinguish whether values changes are due to the life event itself, or the age at which it is experienced. Young adults who marry are on average five years older than the non-married. Similarly, young adults with children are six years older than those without children. In order to test whether values change was due to age or life events, interactions between marriage, parenthood and age were conducted for each model (not shown). The interaction between age and marriage is not significant. Similarly, the interaction between age and parenthood is not significant. This suggests the experience of marriage and parenthood on individualistic/collectivistic values is due to the experience of marriage and having a child, not the age at which the transition occurs.

The third finding is presented in Model 3. Cohabitation increases young adults' values toward individualism relative to collectivism. Although cohabitors may be more individualistic before the inception of such unions, it is also likely the experience of cohabitation engenders a change in young adults' values. This finding falls in line with other research which shows cohabitors have higher individualistic values, particularly concerning the importance of career success and personal autonomy, than the married (Casper & Sayer, 2000; Clarkberg, Stolzenberg & Waite, 1995).

The fourth important finding of this table is that marriage and parenthood have separate and joint effects on young adults' values. The combination of marriage and parenthood often results in the reorganization of attitudes and values in order to deal with the stresses incurred by these multiple social roles (Thoits, 1992). Model 4 includes marriage, parenthood and cohabitation in the same model to test the independent effects of each transition while holding the other transitions constant. This model shows

marriage increases collectivistic values relative to individualistic values. However, the effect of parenthood on young adults' values does not reach statistical significance. This is due to the high correlation between marriage and parenthood in the sample (.52). Model 4 also shows the age coefficient is reduced to non-significance when including both marriage and parenthood as main effects in the model. In this case, the transitions into marriage increase collectivistic values to a greater degree than the independent effect of age.

Model 5 includes an interaction term between marriage and parenthood to gauge how the combination of these social roles influences values. This interaction is significant, suggesting value toward collectivism increases when both of these roles are assumed. In sum, the independent effects of marriage and parenthood, as well as the combination of these roles, increases collectivistic values among young adults. Whether they occur separately or concurrently, marriage and parenthood are stronger predictors of values change among young adults than age.

The fifth important finding of this table is parents' own values toward individualism/collectivism influence young adults' values after adding controls for young adults' life transitions. These results suggest parents' values are important in directing young adults' values toward greater individualism. The significance of parents' own values on that of their children after including life course transitions suggests the intergenerational transmission of values influences the change in young adults' values over time.

The sixth important finding of Table 4.7 is parental divorce increases individualistic values among young adults. In line with research indicating children of

divorce have less positive attitudes about marriage and childbearing than children with continuously married parents (Amato & DeBoer, 2001; Cunningham & Thornton, 2006; Kapinus, 2004), these results suggest young adults who experience parental divorce develop more individualistic—and less collectivistic—values than young adults whose parents have not divorced.

Table 4.8 is a fixed effects model with the same variables included in Table 4.7, except for time-invariant variables. With the exception of cohabitation, these models confirm there is significant within-individual variation in values as young adults' marry and/or have children. These results confirm the change in values toward collectivism over time is not due to differences between groups, such as the married and non-married, but rather due to within-individual changes in values over the life course.[i]

Table 4.8: Fixed Effects Regression Models Relating Age, Gender and Young Adult Life Course Transitions to the Change in Individualistic/Collectivistic Values Among Young Adults Ages 16-35, LSOG

	M1		M2		M3		M4		M5	
Age	-.07		-.13	**	-.15	**	-.06		-.03	
	(.08)		(.08)		(.07)		(.08)		(.08)	
College degree or higher	.38		.37		.39		.37		.23	
	(.84)		(.84)		(.84)		(.84)		(.84)	
Enrolled in college	.94	*	1.00	*	1.00	*	.93	*	.89	*
	(.51)		(.51)		(.51)		(.51)		(.51)	
Married	-1.72	**					-1.66	**	-2.31	**
	(.68)						(.72)		(.81)	
Have children			-.29				.03		-1.87	
			(.56)				(.57)		(1.17)	
Cohabited					.82		.38		.50	
					(.79)		(.81)		(.81)	
Married * Have children									-2.31	*
									(1.25)	
Constant	4.46		5.56		5.80		4.55		3.88	
Person-years	1,128		1,128		1,128		1,128		1,128	
N	451		451		451		451		451	

Standard errors in parentheses
***p<.001, **p<.05, *p<.10

Discussion

To address the first research question, parents' values in 1971 and young adults' values in 2000 were compared to assess whether young adults' values were more/less individualistic over time by holding age constant. These findings revealed young adults' ranked individualistic values higher than their parents at similar ages, but also reported "loyalty to one's own" as more desirable in life. This finding suggests young adults' have higher individualistic sentiments than their parents, but still highly value commitment to family and community.

The second research question asked how values change in relation to age. Random and fixed effects models that included age and period effects were tested. These models confirm young adults become more collectivistic as they age. This finding suggests individualistic/collectivistic values are highly sensitive to developmental changes over the life course.

The third research question focused on the effects of family background, namely parents' divorce, education and parents' own values, on young adults' values. Parents' individualistic/collectivistic values had a significant influence on young adults' values toward individualism, even after controlling for life course transitions. Further, random effects models (Tables 4.6 and 4.7) show young adults whose parents do and do not divorce have different patterns of values change. In this case, young adults whose parents ever divorce experience an increase in their individualistic values to a greater degree than young adults with continuously married parents. These findings suggest socialization within families, whether through parents' own values or marital behaviors, influences young adults' values over time.

The fourth research question was to determine whether values change as a result of life course transitions such as college graduation, college enrollment, marriage, cohabitation and parenthood, independently of age. With the exception of college graduation, the effects of these transitions on the change in values over time were significant. These findings showed young adults enrolled in college develop stronger values toward individualism over time. Higher education increases individualistic values perhaps because college provides a venue for self-exploration and skill development. Also, college-educated individuals are often afforded more freedom in their personal

lives and in the careers they choose. As shown in the random and fixed effects models, the effect of college enrollment on values change is a result of between-individual (difference between those with and without a college degree) and within-individual variation.

Not surprisingly, marriage and parenthood increase values toward collectivism. The acquisition of these social roles, both independently and jointly, shifts young adults' values from self-oriented values to values which emphasize involvement with one's family and community. The effect of age in increasing collectivistic values was not significant once adding young adults' marriage and parenthood in the same model (Tables 4.7 and 4.8, Models 4 & 5). In this case, the significant life events that characterize adulthood, such as marriage and parenthood, trumped the effects on value change relative to age.

In contrast to the effects of marriage and parenthood, the experience of cohabitation increases individualistic values. This finding suggests cohabitors and married individuals, with or without children, have a different set of values, which has been shown in other research (Clarkberg, Stolzenberg & Waite, 1995). These differences are due, in part, to selection effects, as well as the social contexts in which these attitudes are formed (Cunningham, Beutel, Barber & Thornton, 2005). The non-significance of cohabitation on values change in the fixed effects model is a further indication the shift in values toward individualism is due to differences *between* those who have cohabited and not cohabited, not due to within-person change.

Although the intergenerational linkages and longitudinal design of the LSOG makes it particularly useful for the study of values change, there are several limitations of

the study's sample and measures that deserve mention. First, the study of values change requires at least two waves of data, which restricted the sample to 479 young adults. The sample was further reduced to 451 cases because approximately 28 young adults did not fill out the Rokeach Value Survey correctly. The small sample requires a cautionary interpretation of the results. The small sample also did not allow for separate models to be run by gender. Moreover, the sample is comprised of white young adults from mainly working and middle-class families. Thus these results are not generalizable to a nationally representative population. It is likely the occurrence of young adults' transitions have different effects on values change by race/ethnicity that cannot be measured here.

This study provides a first look at how values are shaped by the new experiences and social roles adopted in young adulthood. Collectivistic values among young adults increase in importance as they age, but are also dependent on whether they graduate college, as well as the types of relationships they enter. Young adults' values are also embedded within a family context. Transmission of values between parents and their children remains strong, even after taking into account variation in values change between and within-individuals over time. The receptivity of young adults to new ideas about the self in relation to the social world is evident in this particular sample. The fluid and responsive nature of values to social contexts is important to remember when studying the life course transitions characterized by young adulthood.

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[i] Random effects models are often preferred over fixed effects because they can include time-invariant predictors. However, there are no clearly defined criteria for choosing one method over the other in family research. The Hausman (1978) chi-square test was conducted to test differences between the coefficients in Tables 4.7 and 4.8. The chi-square value with 6 degrees of freedom (χ=-26.13) suggests there is a significant difference between the coefficients in these models, in which case the fixed effects estimates may be more appropriate (Johnson, 1995). In this case, there is sufficient evidence to suggest within-person variation on individualistic/collectivistic values over time as a result of marriage and parenthood among young adults.