Financial Planning For Retirement By Parents Of College Students

Kelly J. Todd¹ and Sharon A. DeVaney²

Parents of college students were surveyed about satisfaction with retirement planning and the use of retirement savings for children's college expenses. Those who had consulted a financial adviser for retirement were satisfied with their retirement planning as were those where the husband had a pension plan. Parents with two children in college were more likely to have used retirement savings to pay for college costs. When the first child contributed less to college, parents were more likely to use retirement savings. Upper income parents were less likely to use retirement savings for college expenses.

Key Words: College student expenditures, Family finance, Financial planning, Retirement, Saving

Background

Retirement Planning

Financial decisions of families at mid-life are likely to be influenced by the cost of children's college education and the need to save for retirement. The 1995 Survey of Consumer Finances revealed that the proportion of all families who indicated retirement was an important reason for saving increased from 18 to 24% between 1989 and 1995 (Kennickell, Starr-McCluer & Sundén, 1997). Liquidity was the only savings motive considered more important than saving for retirement. Saving for liquidity was identified as important by one-third of all families in each of 1989 and 1995. Comparable figures for education were 8 and 11%, respectively.

While many believe that saving for retirement is important, they may be unable to save as much as they want. Workers' confidence in their retirement income prospects dropped sharply during the past year, according to the 1996 Retirement Confidence Survey (Yakoboski & Schiffenbauer, 1997). In 1996, 19% of workers were very confident that they would have enough money to live comfortably throughout retirement compared with 22% in 1995. An additional 43% were somewhat confident in 1996 regarding retirement income compared to 52% in 1995. Although workers believe that their retirement income prospects will depend heavily on their personal savings decisions, only 62% report saving regularly and more than one-third have nothing saved for retirement.

In the past, workers have come to depend on employers to provide much of their retirement income. But, the expectation that employer-provided pensions would form the basis for retirement income is changing and probably reflects trends in pension coverage (Woods, 1994). Data from a series of studies (1979, 1983, 1988, 1993) of the Current Population Survey (CPS) showed that, although there was a shift from traditional defined benefit pensions (DB) to defined contribution (DC) plans among both men and women and among all age cohorts, the trend was a bit stronger for men and for younger workers. Also, both older and younger men of the baby boomer cohort experienced a decline in pension coverage compared to preceding cohorts while coverage among both early and late baby-boomer women increased. As pensions have shifted to defined contributions plans, experts tend to express uncertainty about the amount of future benefits based on employee participation rates and individual management of investments.

Factors Affecting Retirement Planning

Retirement planning can include a wide range of decisions, from deciding where to live to developing hobbies. In this study, retirement planning refers to financial preparation for retirement. Researchers have examined factors affecting retirement planning from several approaches: perceived adequacy of retirement income of pre-retired households (Malrouto & Xiao, 1995); relationship between needed and accumulated resources of pre-retired males (Li, Montalto & Geistfeld, 1996); and confidence in a financially secure retirement

¹Kelly J. Todd, Deloitte & Touche LLP, Two Prudential Plaza, 180 North Stetson Avenue, Chicago IL 60601-6779. Phone: 312-946-2631. ²Sharon A. DeVaney, Assistant Professor, Purdue University, 216 Matthews Hall, West Lafayette, IN 47907-1262. Phone: 765-494-8300. Fax: 765-494-0869. E-mail: sdevaney@purdue.edu.

The research was completed when Kelly J. Todd was enrolled in an honors project at Purdue University. Ms. Todd thanks Sharon A. DeVaney, her adviser, for her advice and support throughout the research process, and Ya-ping Su for her assistance in working with the survey data.

Financial Counseling and Planning, Volume 8(1), 1997

of retired and non-retired individuals (DeVaney, 1995). Expecting a pension and accumulating other savings are shown to be very important predictors of satisfaction with retirement planning.

Preretirees' perceived adequacy of retirement income differed significantly by age, gender, race, income, employment status, and planning horizon (Malrouto & Xiao, 1995). Analysis of 1,971 households in the 1989 Survey of Consumer Finances showed that younger respondents, females, whites, self-employed workers, and those with incomes between \$10,000 and \$19,999 were less likely to perceive their future retirement income to be adequate than otherwise similar households. These findings are plausible except for the effect of race, which needs some interpretation. Whites may have higher expectations about retirement and feel unprepared while nonwhites may foresee little change in their living standards in retirement and, subsequently feel they have sufficient retirement income.

Research on male pre-retirees from the National Longitudinal Survey of Older Men (NLS) compared accumulated financial resources and the individual's needed financial resources "at the point in time when the individual planned to retire" (Li, Montalto & Geistfeld, 1996). The sample for the study was men born between 1907 and 1921 who planned to retire between 1970 and 1990. Only 46% had adequate financial resources for retirement according to study's definition of adequacy. Not surprisingly, adequacy was shown for men who were white, had a longer planning horizon, planned to retire at age 65 or later, and owned assets. Of the asset variables, pension ownership had the largest effect on the probability of having adequate financial resources for retirement. Ownership of business assets had the second largest effect, although much smaller than the effect of pension ownership, followed by ownership of stocks/bonds/mutual funds, and home ownership (Li, et al., 1996).

Research which compared 600 pre-retirees and 200 retirees on confidence in a financially secure retirement provided additional insight into retirement planning (DeVaney, 1995). Data from the 1993 Retirement Confidence Survey sponsored by the Employee Benefit Research Institute (EBRI) showed that for both groups, there was a positive relationship between confidence and having a satisfactory pension plan, good health, and believing that they had enough money for basic expenses. Additional factors related to confidence for the non-retired were perceived job security, having started saving,

and having a supplemental retirement annuity. Nonretired men were more likely to be confident about planning than women. In summary, a pension and other savings or assets were consistent predictors in these studies of adequacy or the perception of adequacy in retirement planning.

College Planning

In addition to saving for retirement, many families attempt to save for children's college education. A steep upward spiral in college costs has slowed, but increases in college costs outpaced inflation again in 1996 (Riechmann, 1996). The College Board found that four year public colleges and universities boosted undergraduate tuition in 1996 by an average of 6%. However, this is below the double digit increases in tuition costs which occurred annually between 1991 and 1993. For 1996-97, instate tuition and fees, not counting room and board, averaged \$2,811 at public four-year colleges and \$12,823 at private schools. The amount of aid from federal, state, and school sources was up 4% from 1994-95. But, these costs do not include out of state tuition and fees which can be several thousand dollars more per year.

A report from the General Accounting Office showed that college tuition on average jumped 234% between the 1980-81 and 1994-95 school years (Meckler, 1996). That compares with an 82% increase in median household income over the same period and a 74% increase in the Labor Department's Consumer Price Index. Industry watchers said that the increased costs and fewer grants are squeezing students and forcing them to turn to lenders or work for money (Meckler, 1996).

The volume of student loans exploded after 1992 when Congress opened up federal loan programs to more middle-class families. Between 1992 and 1994, borrowing under federal student-loan programs rose 57% to \$23.1 billion. Callan, executive director of the California Higher Education Policy Center, stated "In the past, every generation took on most of the responsibility for educating the next. Now the young are paying for it themselves, out of future earnings" (Graham, 1995, p. B1). Hartle of the American Council on Education says that a possible unintended consequence of increasingly high levels of educational debt is that students will avoid lower-paying careers such as teaching because of the greater difficulty in repaying loans, and also may be deterred from seeking advanced degrees.

Factors Affecting College Planning

There is a growing body of research on factors affecting college planning and household financial status (Chang, 1995; Churaman, 1992a, 1992b, 1992c; DeLuca & Sanik, 1994). Churaman (1992a; 1992b; 1992c), using information from the 1987 National Postsecondary Student Aid Study, showed that the proportion of parents giving money to children for college costs was highest for two-parent families and that there were was a positive relationship between financial assets and contributions to college costs. De Luca and Sanik (1994) found that financial assets, number of children in college, and parents' education significantly predicted college expenditures.

Chang's (1995) study on the effect of education expectations on non-retirement financial asset accumulation found no significant effect on this asset accumulation. She hypothesized that the nearer a household is to having children in college, the more nonretirement assets it would have accumulated to pay for college. Her interpretation was that, perhaps, households would use all available financial resources: current income, accumulated assets, borrowing, or financial aid, to finance children's education.

Hanna and Chen (1996) and Weagley (1995) provided normative overviews of financial planning for college, and proposed that families should start investing for college at least 15 years in advance and should rely initially on stocks. However, many parents do not save for college for their children. Lee, Hanna and Sirigar (1997) found that only 28% of parents with children under 18 listed saving for college as an important goal. An International Association of Financial Planning (IAFP) survey of 550 parents who have children under 18 living at home and with household incomes of at least \$30,000 found that less than half of parents with a financial plan were saving for college (IAFP Planning Matters, 1996). While 83% said they had a financial plan, only 44% of those said they were saving for children's college education. When asked what their financial plans include, 64% of respondents said a 401(k) or other pension vehicle, 59% said a savings account, 51%, an investment plan, and 45%, a household budget. The IAFP concluded that even parents with a plan may be unprepared for college costs.

A survey by Fidelity Investments found that almost half of parents with children in college expected the total costs to be less than \$25,000, far less than the \$44,740 to

Financial Planning for Retirement by Parents of College Students

\$94,400 they are likely to pay (O'Connell, 1996). Johnson, a former college administrator and now a financial planner, recommends that parents should save 60 to 75% of expected college costs (Lavine, 1997). But, the cost of sending more than one child to college may make it difficult for many families to afford the desired college education for their children.

Purpose and Hypotheses

Although parents want their children to obtain a college education, parents need to prepare for retirement as well. The overall purpose of the study was to examine the competing demands of retirement and college planning. The specific aims were to determine factors that predict (a) satisfaction with retirement savings and (b) the use of retirement savings for college costs. The review of literature revealed little information on the relationship between financing children's college costs and retirement planning. The effect of factors such as using an adviser for retirement and college planning on satisfaction with retirement planning were not previously investigated. Also, little was known about the effect of using retirement savings for college costs.

The following hypotheses were formulated based on previous research (in each case, the relationship is based on holding other factors constant):

Satisfaction with Retirement Planning

- H_1 Respondents with more children are less satisfied with retirement planning than those with fewer children.
- H_2 Respondents with higher levels of education and income, a job-related pension plan, who used a financial adviser for retirement and college planning, and who had savings for retirement and college costs are more likely to be satisfied with retirement planning.

Using Retirement Savings for College Costs

- H₁ Respondents with lower levels of education and income, without pension plans, and with two or more children in college at once are more likely to use retirement savings to pay for children's college costs.
- H₂ Respondents who didn't consult a financial adviser for college or retirement planning or whose child did not contribute to college costs are more likely to have used retirement savings to pay for children's college costs.

Financial Counseling and Planning, Volume 8(1), 1997

Methodology

Instrument and Variables

A survey instrument was developed, pilot tested, revised, and tested again. The final version consisted of 35 questions: 11 on retirement planning, 13 on college planning, and 11 on demographic characteristics.^a To examine satisfaction, the question "How satisfied are you with your financial planning for retirement?" was used. Responses were collected on a scale from 1 (very dissatisfied) to 5 (very satisfied). Later the responses were coded to predict the satisfied group with the reference group being those who were not satisfied or undecided.

To examine use of retirement savings for college costs, the survey focused broadly on the concept of retirement savings and assumed that it meant any financial resources that were set aside for retirement. The question "Have you had to (or did you ever have to) use money that you had set aside for retirement to pay for your children's college costs?" was asked. The yes and no answers were coded to predict those who used the retirement savings with the reference group being those who did not use retirement savings for children's college costs.

Independent variables to examine satisfaction with retirement planning consisted of: number of children in the family, education of respondent, household income, and questions on retirement planning and college planning. Retirement planning was modeled by asking about pensions, use of a professional adviser, and the question, "If you could do it all over again, would you start saving sooner?" Pension receipt was separated into three variables: whether a contribution was being made by an employer or the individual to a pension plan was being made for the husband, the wife, or a single parent. College planning questions included the use of a professional financial adviser for college and, "If you could do it all over again, would you put more money in a children's college account on an annual basis?" Variables for the model of retirement satisfaction are shown in Table 1.

In the examination of predictors of using retirement savings to finance college costs, the independent variables focused on college planning. Respondent's education and household income were included. The variable for family size was whether there were two children in college at the same time. College planning measures included: percentage of college costs contributed by the first child, when did parents start saving for the first child's college education, whether a scholarship was held by the first child, and the use of a professional financial adviser for college. Retirement planning was modeled by variables for the pensions and the use of a professional financial adviser for retirement. Coding of variables is shown in Table 1 and the Appendix.

Sample

The requirement for inclusion in the study was to have at least one child who was finishing college or have children who had recently attended college. The investigators intended to use the names and addresses of 450 parents of high school graduates from 1991 who lived in a suburb of a large city in the Midwest. Ninety percent of the local high school graduates attended college even though the suburb was ethnically diverse (Gustafson, 1992).^b However, a review of current telephone numbers showed that about 50% of parents on the list had moved since 1991. This reduced the size of the potential sample and it was necessary to increase the sample with a snowball technique. Seniors in a variety of classes at a large university about 100 miles from the suburban high school were contacted and asked if they would provide names and address of their parents for inclusion in the study.

The survey, a cover letter, a postage paid return envelope, and a postcard indicating participation were mailed to the sample (n = 362). Three weeks later, a survey was sent to parents who had not responded. The final response rate was 50%.

Findings

Characteristics of the Sample

Descriptive statistics are shown in Table 1. Half of the respondents were between 40 and 50; 42.4% were between 51 and 60, and 5.9% were between 61 and 70. The average number of children was 3 (SD = 1.26).

One-third of the respondents had an advanced or professional degree. Sixty-three percent of respondents were males and 37% were females. Ninety-one percent were married and 93% were white. Only 17% of the households earned less than \$50,000 while 31% of the households earned more than \$100,000 annually. Forty-three percent of husbands and 15% of spouses had a pension plan. When asked what would they change about their retirement plans, 58% said they would start saving money sooner for retirement. Thirty percent had used a professional financial adviser for retirement.

Table 1			
Descriptive Statistics of the	Sampl	le(N =	181)
Variables	Ń	Range	Mean (SD) or %
Demographic:			
Number of children		1-4	2.97 (1.26)
Two in college at same time			
0 = otherwise	90		51.7
1 = yes	84		48.3
Education of respondent			
HS or some college	55		30.4
BA or BS	60		33.1
advanced degree	66		36.5
Household income			
less than \$50,000	30		16.6
\$50 to \$100,000	95		52.5
more than \$100,000	56		30.9
Retirement Planning:			
Husband's pension			
0 = otherwise	104		57.5
1 = contribution	77		42.5
Wife's pension			
0 = otherwise	153		84.5
1 = contribution	28		15.5
Single parent's pension			
0=otherwise	165		91.2
1=contribution	16		8.8
Would start saving sooner for retir	ement		
0 = otherwise	76		42.0
1 = yes	105		58.0
Used retirement adviser			
0 = otherwise	127		70.2
1 = yes	54		29.8
College Planning:			
Would contribute more to college	account	annually	
0 = otherwise	107		59.1
1 = yes	74		40.9
% contributed by 1st child			
	(0-100	22.2 (25.7)
Start saving for 1st child's education	on		
1 = elem school	59		32.6
2 = junior high	12		6.6
3 = high school	46		25.4
4 = never	64		35.4
Scholarship held by 1st child			
0 = otherwise	120		66.3
1 = yes	61		33.7
College adviser			
0 = otherwise	58		87.3
1 = yes	23		12.7

Summer jobs, jobs at college, and loans obtained by the student (in that order) were the most important ways that children contributed to college costs. The first child in the family contributed an average of 22% of their college costs. One-third of all first children obtained scholarships. The second child contributed an average of 16% of total college costs. Thirteen percent of the sample had obtained professional advice for college planning. About half of the respondents had two children in college at the same time; 16% had three and

Financial Planning for Retirement by Parents of College Students

2% had four in college at once. For each of the 1st, 2nd, 3rd, and 4th child, about one-third of parents began to save in elementary school, less than 10% began to save in junior high, 20% began to save in high school, and one-third *never* saved for college costs. Although information was collected about when families began to save for the 1st through 4th child's education, only the data for the first child was used in the analysis.

Satisfaction with Retirement Planning

Logistic regression was used to answer the two research questions. The logistic technique was the appropriate method to investigate what independent variables were related to a binary dependent variable (Maddala, 1992, p. 327). Findings from the regression on satisfaction with retirement planning are shown in Table 2. More than half (57%) were satisfied with their financial planning for retirement.

Pension

Husbands with a pension were more likely to be satisfied with retirement planning, all else equal. The significant finding for having a pension plan is consistent with previous research on feeling confident about retirement planning if the respondent had an employer pension (DeVaney, 1995). However, there was no effect for wife's pension or single parent's pension.

Retirement Adviser

Compared to those who did not consult a professional adviser about retirement, those who did were more likely to be satisfied with retirement planning. Satisfaction with use of a professional financial adviser for retirement planning has not been extensively demonstrated in previous research. Thus, this result should be of interest to parents, financial planners, and others.

When to Start Saving for Retirement

Respondents who were less likely to say that they should have started saving sooner for retirement were satisfied with retirement planning. Satisfaction with retirement planning did not vary by number of children in the family, education level, household income, putting more money into a college account annually or the use of an adviser for college planning.

Use of Retirement Savings for College Costs

Logistic regression was used to predict the use of retirement savings for college costs. About one-fourth of the respondents (24%) used money that was set aside for

retirement to pay for children's college costs. See Table 3 for results of the analysis.

Table 2

Logistic	Analysis	of	Satisfaction	with	Retirement
Planning					

Variable	coefficie	nt SE	P value	
Intercept	-0.250	0.745	0.113	
Number children	-0.052	0.142	0.715	
BA or BS	0.043	0.470	0.928	
Advanced degree	0.689	0.462	0.135	
Middle income	0.429	0.515	0.405	
Upper income	0.362	0.581	0.534	
Husband has pension	1.298	0.607	0.032*	
Wife has pension	-0.318	0.756	0.674	
Single parent has pension	0.580	0.898	0.519	
Retirement adviser	1.632	0.448	0.000***	
Would save sooner	-0.989	0.383	0.009**	
\$ college account	0.485	0.377	0.198	
College adviser	-0.527	0.865	0.353	
Pseudo $R^2 = 0.22$				
* p < 0.05, ** p < 0.01, *** p < 0.001				

Demographic Factors

Respondents with 2 children in college at the same time were more likely to use retirement savings for college costs, all else equal. Compared to parents with less education than a college degree, parents with a BA or BS degree were more likely to use retirement savings to pay for college costs. Compared to parents with annual household incomes below \$50,000, those with upper incomes (over \$100,000) were less likely to use retirement savings for college costs. There was no difference between low and middle income groups in the possibility of using retirement savings for college costs.

College and Retirement Planning

Respondents whose first child contributed less to college costs were more likely to use retirement savings. There was no effect for use of a professional adviser for college or retirement planning on use of retirement savings for college costs.

Discussion

The majority of respondents were well-educated with relatively high levels of income, but only half were satisfied with their retirement planning. Also, one-fourth had used retirement savings to pay for college costs. Parents with lower incomes are likely to feel financial strain when faced with college costs. Parents with more education are likely to have higher incomes and may be able to manage college costs better.

Table 3

Logistic Analysis of Using Retirement Savings for College Costs

College Costs				
Variable	coefficien	t SE	P value	
Intercept	-1.224	0.891	0.169	
Two in college	0.567	0.285	0.043*	
BA or BS	1.677	0.582	0.004**	
Advanced degree	0.418	0.573	0.467	
Middle income	-0.952	0.581	0.101	
Upper income	-1.968	0.717	0.006**	
Husband has pension	-0.346	0.439	0.432	
Wife has pension	-1.403	0.755	0.063	
Single parent has pension	-1.402	0.473	0.976	
% contributed by 1st child	-0.020	0.010	0.044*	
When started saving for 1st	0.101	0.175	0.563	
Scholarship 1st child	-0.268	0.453	0.554	
College adviser	0.911	0.590	0.123	
Retirement adviser	-0.779	0.527	0.139	
Pseudo $R^2 = 0.23$				
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$				

The presence of a pension plan for husbands was related to satisfaction with retirement planning. Some of the plans involved participant's contribution. This finding indicates the importance of participation in retirement plans and making appropriate selections among investment choices. The study showed support for the use of a financial adviser for retirement planning while there was no support for a financial adviser for college planning. The significance of the first child's contribution to college costs through their own earnings was important. When a smaller percentage was contributed by the first child, parents were more likely to use retirement savings for college.

Recommendation for Use of Advisers

The findings provide useful information for financial advisers and counselors because there is strong support for the use of financial advisers for retirement planning. Yet, there was little use of financial advisers for college planning. Industry publications regularly offer college planning advice (O'Connell, 1996). And, researchers agree with their suggestions (Hanna & Chen, 1996; Weagley, 1995). The standard advice for college planning is to start early by estimating the amount needed for college costs, establishing automatic deductions to college accounts, and investing in equities. Parents are advised to continue to set aside tax-deferred savings in retirement accounts because these funds are usually not counted as usable assets in financial-aid formulas.

Alternatives to College Planning

The increased use of educational loans suggests that other alternatives are available if parents are unable or unwilling to pay for college. College students can apply for loans, and they are encouraged to shop for the best loan possible. Federal student loans are usually best because the interest is below market rates and capped, never rising above set government limits, and the federal government makes the interest payments while students are in school. However, the type of loan students qualify for depends on financial need.

Parents, too, are advised to borrow for college costs as an alternative to saving in advance. Home equity loans are frequently suggested because interest is tax-deductible. Parents can borrow under the federal Parent Loan for Undergraduate Students (PLUS) program with interest rates capped at 9%. If government programs were not available for borrowing by students and parents, many families would probably have to use more of their own savings or income to pay for college.

Parents may pay for college from current income and defer saving for retirement until children are educated. However, this technique does not allow for as lengthy a period for growth of the investment. Children can be encouraged to save for college during their high school years. One study of teens showed that they had a fair amount of discretionary income, but only a small proportion of teens were saving (Alhabeeb, 1996).

Limitations and Implications

Several of the hypotheses were supported or partly supported, but there is room for additional research. The survey asked how many children were attending each type of college, i.e., two year, public, and private. Many children had gone to more than one type of college (junior college, public four year university, etc.) and the responses were difficult to tabulate and analyze. In the future, it would be useful to collect information on college attendance of each child and how college costs were handled, but that was beyond the scope of this study. It would be interesting to interview parents to help understand how decisions were made about saving or not saving for college.

It would be useful to replicate the study with parents who were more diverse in their socioeconomic characteristics. Because the final sample was not as ethnically diverse as anticipated, it was not possible to compare differences in retirement satisfaction and college planning by ethnicity.

Finally, a limitation of the study is that the sample was not randomly drawn. The findings should be generalized

Financial Planning for Retirement by Parents of College Students

only to parents with similar characteristics. Parents who are less well off financially may have greater dependence on loans, may have to rely more on children's earnings or scholarships, or their children may have attended local junior colleges and public universities instead of more expensive universities, or they may not have obtained a college education.

Endnotes

- a. The survey is available from the investigators.
- b. Over 90% of the graduates of the Oak Park River Forest High School, Oak Park, Illinois, class of 1991 enrolled in more than 158 different colleges, universities, community colleges, and trade or technical schools. Of the 1991 graduates, 70.6% were white, 22.5% were African American, 4.3% were Asian, 2.2% were Hispanic, and 0.4% were Native American.

References

- Alhabeeb, M. J. (1996). Teenagers' money, discretionary spending and saving. *Financial Counseling and Planning*, 7, 123-132.
- Chang, Y. R. (1995). The effect of children's educational expectation on non-retirement financial asset accumulation. *Family Economics and Resource Management Biennial*, *1*, 57-62.
- Churaman, C. V. (1992a). Financing of college education by minority and white families. *The Journal of Consumer Affairs*, 26(2), 324-350.
- Churaman, C. V. (1992b). Financing of college education by single-parent and two-parent families. *Journal of Family and Economic Issues*, 13(1), 96-113.
- Churaman, C. V. (1992c). The cost of the support of college students as affected by their choice of public or private school and residence. *Financial Counseling and Planning*, *3* 135-156.
- De Luca, B. M. & Sanik, M. M. (1994). Higher education expenditure: Private household contributions. In Teresa Mauldin (Ed.) Consumer Interests Annual, 40, 336-342.
- DeVaney, S. A. (1995). Confidence in a financially secure retirement: Differences between non-retired and retired. In K. F. Folk (Ed.) *Consumer Interests Annual*, 41, 42-48.
- Employee Benefit Research Institute/Matthew Greenwald & Associates Inc. (1996, November). 1996 Retirement Confidence survey. *Pension Benefits*, 5(11), 1-2.
- Graham, E. (1995, August 11). Study now, pay later: Students pile on debt. *The Wall Street Journal*, B1.
- Gustafson, G. A. (1992). Oak Park High School 1991-1992 Profile. Oak Park, IL.
- Hanna, S. & Chen, P. (1996). Efficient portfolios for saving for college. *Financial Counseling and Planning*, 7, 115-122.
- *IAFP Planning Matters.* (1996, October). Less than half of parents with financial plans saving for college, IAFP study finds, *1*(10), 6.
- Kennickell, A. B., Starr-McCluer, M. & Sundén, A. E. (1997, January). Family finances in the U.S.: Recent evidence from the Survey of Consumer Finances. *Federal Reserve Bulletin*, 83(1), 1-24.

©1997, Association for Financial Counseling and Planning Education. All rights of reproduction in any form reserved.

Financial Counseling and Planning, Volume 8(1), 1997

- Lavine, A. (1997). Pomp and circumstance. *Financial Planning*, May, 172, 187.
- Lee, S., Hanna, S. & Sirigar, M. (1997). Children's college as a saving goal. *Financial Counseling and Planning*, 8(1), 33-36..
- Li, J., Montalto, C. P. & Geistfeld, L. V. (1996). Determinants of financial adequacy for retirement. *Financial Counseling and Planning*, 7, 39-48.
- Maddala, G. S. (1992). *Introduction to econometrics*. NY: MacMillan Company.
- Malrouto, Y. L. & Xiao, J. J. (1995). Perceived adequacy of retirement income. *Financial Counseling and Planning*, 6, 17-24.
- Meckler, L. (1996, August 16). College tuition rises at triple

inflation rate. Lafayette Indiana Journal & Courier, A1.

- O'Connell, V. (1996, December 12). Plotting your course. *The Wall Street Journal*, R20.
- Riechmann, D. (1996, September 26). College costs on the rise. *Lafayette Journal and Courier*, A13.
- Weagley, R. O. (1995). College savings: Schooling on choices. Family Economics and Resource Management Biennial, 1, 63-66.
- Woods, J. R. (1994). Pension coverage among the baby boomers: Initial findings from the 1993 survey. *Social Security Bulletin*, 57(3) Fall.
- Yakoboski, P. & Schiffenbauer, A. (1997, January). The reality of retirement today: Lessons in planning for tomorrow. *EBRI Issue Brief Number 181*.