

## A Life Course Investigation of Economic Pressure in Emerging Adulthood

Clinton G. Gudmunson, Iowa State University<sup>1</sup>  
Virginia Solis Zuiker, University of Minnesota<sup>2</sup>

This study investigates whether economic pressure in emerging adulthood is influenced by childhood social background and differing patterns of entry into adult roles. More specifically, gender, ethnicity-race, parent SES, family structure, and high school GPA may influence the coordinated movements into adult roles such as the timing of moving away from home, completing an education, full-time work, marriage, and parenthood. We looked at individual patterns of financial economic pressure as it changed over time from ages 25-31.

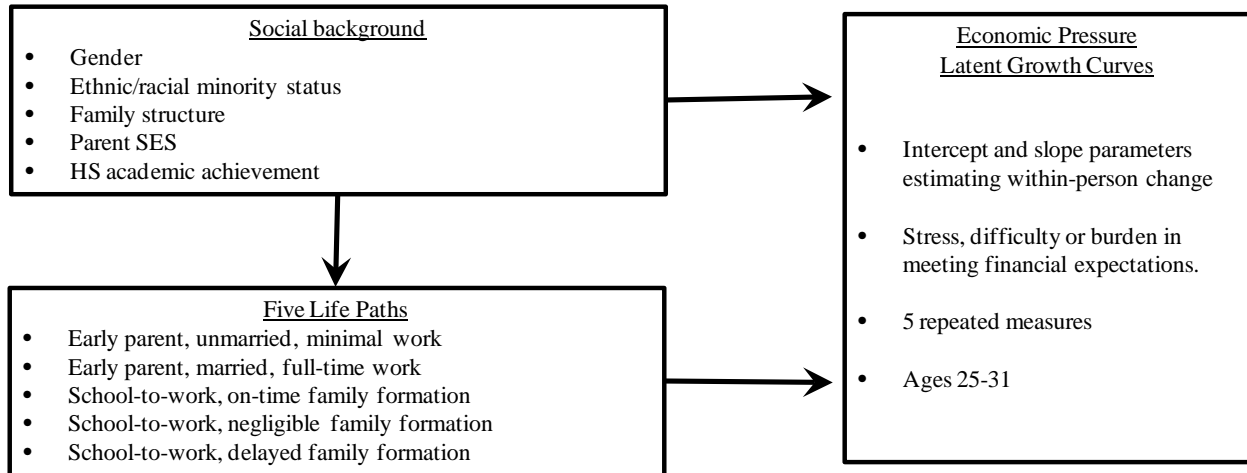


Figure 1. Conceptual Model of the Predictors of Change in Economic Pressure in Early Adulthood

Figure 1 provides an overview of the analysis plan, showing the key variables and relationships in the study. These relationships will be further specified in a set of research questions. The first of two groups of predictors is a set of background variables. These variables include gender, ethnic/racial minority status, family structure, parent socioeconomic status, and high school academic achievement. The background variables were measured in the childhood waves of the study, at ages 17 or younger.

The second group of predictors is a set of life paths that were recently discovered in the YDS sample (Eliason et al., 2009). Eliason and his colleagues investigated the timing and sequencing of transitions to adulthood from ages 17-30 based on various role configurations including whether a respondent was a) living with parents, b) in school, c) working full time, d) married, or e) was a parent. The term “life path” is used in this study to refer to a particular pattern of movement through adult role configurations over time. For example, living at home with parents as a single person, without children while attending school full-time, is an example of a particular role configuration that, over time, could evolve into a different role configuration, such as having moved away from home, finished school and working full-time, as a married parent. The important point is that role configurations are contingent on prior role configurations and change in predictable ways over time (Elder, 1998b; Koc, 2007). The goal for Eliason and his colleagues was to determine whether a smaller set of *latent life pathways* (empirically determined patterns) could adequately summarize the observed patterns in the lives of YDS participants through a special application of latent class analysis. Five latent life pathways (hereafter referred to as life paths) adequately described the life experience of the participants, as each respondent had a high probability of inclusion in one of the five groups.

<sup>1</sup> Assistant Professor, Human Development and Family Studies, 4380 Palmer Building, Suite 1323, Iowa State University, Ames, IA. Phone: (515) 294-8439. Email: cgudmun@iastate.edu.

<sup>2</sup> Associate Professor, Family Social Science, 290 McNeal Hall, 1985 Buford Ave, University of Minnesota, St. Paul, MN. Phone: (612) 625-1900. Email: vzuiker@umn.edu.

These two sets of predictors are used to predict overtime changes in economic pressure from ages 25-31 addressing two research questions:

- 1) *Which social background variables influence the life paths that individuals select into?*
- 2) *Do levels of economic pressure vary for different life course patterns?*

### **Theoretical Focus**

Recent U.S. reports have shown that by ages 25-27 large portions of young people have moved through a number of developmental and social transitions that profoundly shape the financial opportunities and constraints they will encounter in adulthood (Cohen, Kasen, Chen, Hartmark, & Gorden, 2003; Galambos, Barker, & Krahn, 2006; Schulenberg et al., 2004). Moving away from parents, transitioning from school to stable full-time work, marriage, and parenthood are major transitions in the life course of many individuals that give definition to the financial capacities and responsibilities that individuals must balance as they move through adulthood. In many ways, these transitions can lead to a piling up of financial obligations in early adulthood that contribute to the worries and difficulties comprising economic pressure. Moving away from home and becoming more independent intensifies a young person's need to generate income, pay bills, manage money, and deal with financial demands (Mulder & Clark, 2002). School-to-work transitions are often associated with the initiation of student loan payments, relocation costs, and heightened transportation demands. In addition, the family transitions of marriage and parenthood may increase housing costs and expenses associated with family life. These challenges are expected to impact the young person's levels of economic pressure.

To address these matters, two theoretical perspectives were considered; the life course perspective on transitions to adulthood (Elder, 1998a) and an emerging adulthood perspective on early adulthood (Arnett, 2000a). The life course perspective is a broad principles-based approach with tenets outlining, among other things, the importance of attending to age cohorts. Historical forces and linkages to the lives of older and younger generations give structure to paths through life. A life course perspective attends to the historical forces that have lengthened the move from adolescence to adulthood, making it a longer and more gradual process among contemporary young people. Emerging adulthood literature provided descriptive information about the lived experience of those moving into adulthood in recent times, with an emphasis on the divergent life paths of contemporary young people.

### **Data and Methodology**

The Youth Development Study sample in this study consisted of 732 participants, from a single cohort born in 1973-1974, randomly sampled, and originating from public schools in the upper Midwest. In a previous study, Eliason, Mortimer, Vuolo, and Tranby (2009) identified five life paths that summarized meaningful role changes from ages 17-30. Each life path had its own distinctive pattern of socio economic development and timing of family formation derived from multi-level latent class procedures resulting in five distinct patterns. Females comprised 58% of the sample. Twenty-one percent of the respondents indicated they were part of a racial minority group. This was reflective of the population at the time of the initial sampling (Mortimer, 2003). At age 14, a majority of the participants, 58%, were living in an intact two-parent family, 23% were living with a single parent, 14% were living with a stepparent, and 5% were living in some other type of family structure. Parents' average level of income was 5.97 on a 13-point scale, a score which was roughly equivalent to \$30,000 in 1987, and presently equivalent to about \$56,000 when adjusted for historical levels of inflation. On average, the parent with the highest level of education in each family scored 3.58 on an eight-point scale, indicating that they closely averaged obtaining an associate's degree. The mean grade point average (GPA) for participants at age 17 was 2.84, or closest to a B grade.

### **Findings**

To address the first research question, (which social background variables influence the life paths that individuals select into?) we used multinomial logistic regressions. The findings are reported in Table 1.

**Multinomial Logistic Regressions**

Results of multinomial logistic regressions predicting selection into life paths with background variables as predictors were given in the form of odds ratios (Table 1). Odds ratios expressed the effect of a predictor on being in a life path group relative to being in the reference group. The reference group was early parent unmarried, and participants in this group had minimal work engagement during their transition to adulthood. None of the background characteristics significantly distinguished this group from the early parent married group whose members were more engaged in full-time work. Background variables, however, distinguished the early parent unmarried group from three groups who underwent school-to-work transitions and postponed family formation until later in life. Odds ratios showed that females, compared to males, had 64% lower odds of being in the negligible family formation group ( $OR=0.36, p<.001$ ) or in the delayed family formation group ( $OR=0.36, p<.001$ ) relative to being in the early parent unmarried group. Being in the ethnic/racial minority, compared with being White and non-Hispanic, was associated with 46% lower odds of being part of groups that included negligible family formation ( $OR=0.54, p<.05$ ) or on-time family formation ( $OR=0.54, p<.05$ ) relative to being an early parent and unmarried.

**Table 1**

*Odds Ratios from Multinomial Logistic Regressions Predicting Selection into Life Paths*

Background Variables	Latent Life Paths			
	Early parent, married, full-time worker (n=112)	School-to-work, negligible family formation (n=199)	School-to-work, delayed family formation (n=148)	School-to-work, on-time family formation (n=124)
Female	0.70	0.36***	0.36***	0.67
Ethnic/racial minority	0.69	0.54*	0.69	0.54*
Family structure (ages 14-15)				
Intact two-parent (omitted)	1.00	1.00	1.00	1.00
Stepparent	0.77	0.56	0.51	0.77
Single parent	0.93	1.12	1.06	0.82
Other arrangement	0.27	0.53	0.45	0.52
Parental SES (ages 14-15)				
Level of income	0.95	1.20**	1.22**	1.17*
Level of education	1.15	1.31**	1.34***	1.20*
Grade point average (ages 17-18)	1.21	1.56**	2.00***	1.92**
Likelihood ratio test	$\chi^2=140.35 (df=32), p>.001$			
Nagelkerke pseudo R <sup>2</sup>	.182			

Note: The comparison latent life path was early parent unmarried, minimal work (n=149). Levels of income ranged from 1-13. Levels of education ranged from 1-8. \* $p<.05$ , \*\*  $p<.01$ , \*\*\*  $p<.001$ .

Family-of-origin structure when participants were age 14 was not associated with any significant differences in the life paths of the participants when it was tested with the other background variables. Parental SES variables, however, including parent income and education when the participants were age 14, were associated with greater odds of being in a life path with a traditional school-to-work transition rather being in an early parenthood group. For instance, each increment of income on the 13-point scale was respectively associated with 20%, 22%, or 17% increased odds of having negligible family formation ( $OR=1.20, p<.01$ ), delayed family formation ( $OR=1.22, p<.01$ ), or on-time family formation ( $OR=1.17, p<.05$ ). Similar results were obtained from levels of parent education; each increment of education on the 8-point scale was respectively associated with 31%, 34%, or 20% increased odds of experiencing a traditional school-to-work transition and having negligible family formation ( $OR=1.31, p<.01$ ), delayed family formation ( $OR=1.34, p<.001$ ), or on-time family formation ( $OR=1.20, p<.05$ ).

Appreciable selection effects resulted from high school academic achievement measured by participants' GPAs recorded at age 17. Each grade point difference, such as an "A" verses a "B" grade, was associated with 56% greater odds of being in the negligible family formation group ( $OR=1.56, p<.01$ ), 100% greater odds of being in the delayed family formation group ( $OR=2.00, p<.001$ ), and 92% greater odds of being in the on-time family formation group ( $OR=1.92, p<.01$ ) relative to being in the early parent unmarried group. All of these reported effects were net of other predictors in the model which together accounted for 18% of the variance in selection into life paths.

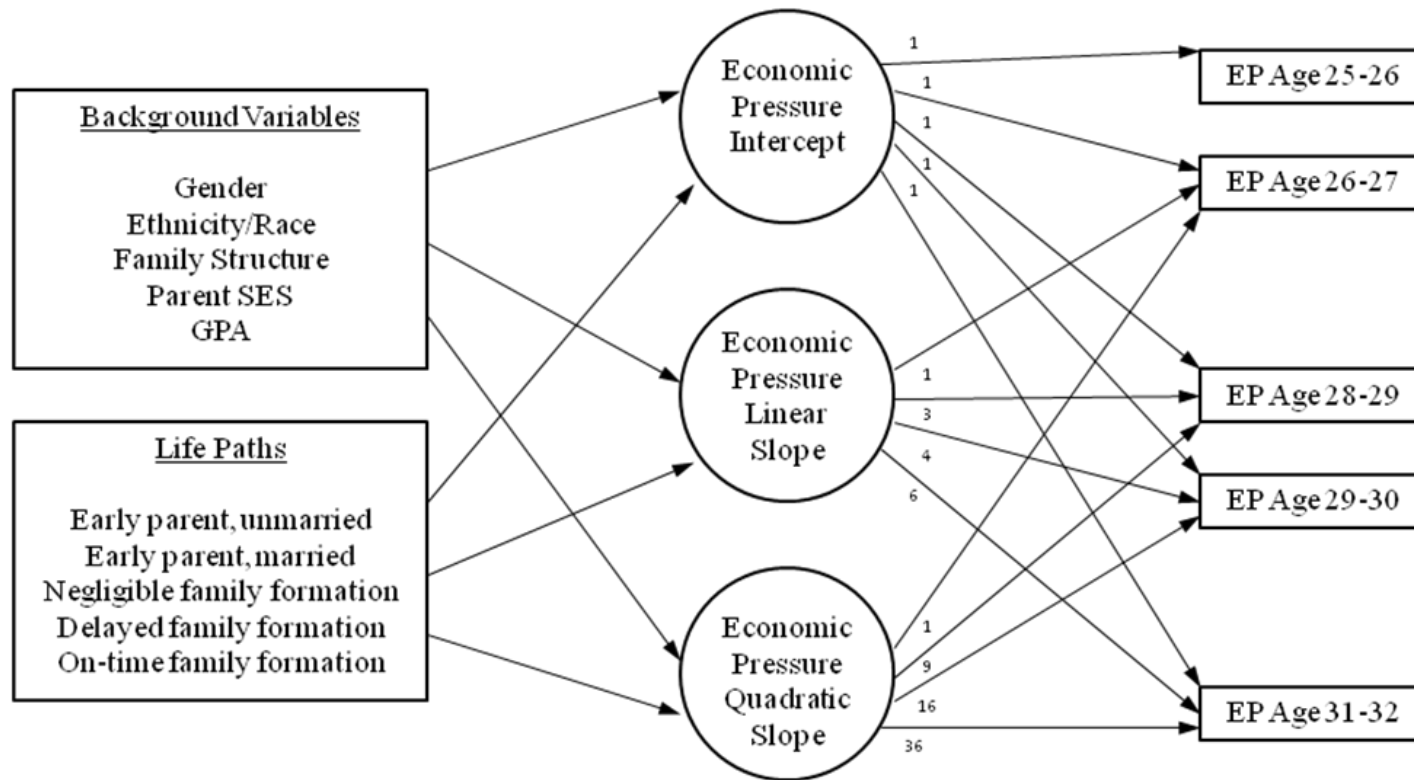


Figure 2. Conceptual Model of the Predictors of Change in Economic Pressure in Early Adulthood

**Table 2**  
*Parameter Estimates for Latent Growth Curve Models of Economic pressure*

	Model 1			Model 2			Model 3		
	Intercept	Slope Components		Intercept	Slope Components		Intercept	Slope Components	
		Linear	Quadratic		Linear	Quadratic		Linear	Quadratic
Constant	12.659***	.011	.013	12.549***	.414*	-.057	13.055***	.258	-.021
<i>Background Variables</i>									
Gender <sup>a</sup>	.849***	.135	-.026				.765***	.119	-.025
Ethnicity/race (1=minority)	1.083*	.151	-.030				.997*	.130	-.026
<i>Family structure</i>									
Intact two-parent (omitted)	--	--	--				--	--	--
Stepparent	.663	-.290	.025				.561	-.310	.026
Single parent	-.361	.409	-.089*				-.354	.433	-.091*
Other arrangement	-.500	.570	-.079				-.512	.537	-.074
Parental SES	-.547*	.020	-.001				-.329	.045	-.004
GPA	-.680**	.011	-.001				-.509	.009	.000
<i>Life Path</i>									
Early parent unmarried (omitted)				--	--	--	--	--	--
Early parent married				-.214	-.414	.060	-.063	-.376	.052
Negligible family formation				-1.851***	-.353	.050	-.940	-.314	.035
Delayed family formation				-2.674***	-.324	.044	-1.700**	-.277	.026
On-time family formation				-2.077***	-.271	.065	-1.429**	-.222	.051
<i>Model Fit</i>									
$\chi^2$ (df) p-value	88.65 (34) <.001			35.74 (18) <.01			103.40 (46) <.001		
CFI, TLI, IFI	.97, .93, .97			.99, .98, .99			.98, .93, .98		
RMSEA	.047			.037			.041		

Note: (N=732). <sup>a</sup>In these models, gender was coded (-1=male, 1=female) this made it easier to generate a male-female mean in later graphs of the trajectory when a “control” for gender was desired. CFI is the comparative fit index, TLI is the Tucker-Lewis index, and RMSEA is the root mean square error of approximation. \**p*<.05, \*\* *p*<.01, \*\*\* *p*<.001.

**Predictors of Economic Pressure Trajectories**

After plotting and examining mean levels of economic pressure over time we used latent growth curve modeling in a structural equation modeling framework to estimate four different baseline models of change over time (level, linear, quadratic, and cubic). The quadratic model was the best fitting model. The chi-square was 31.6 ( $df=10, p<.001$ ), CFI=.987, TLI=.980, and RMSEA=.052. These fit statistics suggested acceptable if not excellent fit to the data. Furthermore, there was significant variation in the intercepts and slopes between the individual growth curves of individuals in the sample. Thus, we constructed a model incorporating predictors of the intercept and slope parameters as depicted in figure 2.

The conceptual model depicted in Figure 2 was tested in three steps: 1) background variables alone, 2) life course predictors along, and 3) a full model with background and life course predictors together. These results are shown in Table 2.

The first model in Table 2 provides estimates of the effects of background variables on the trajectories of economic pressure. Model 1 had an acceptable fit with a chi-square of 88.65 ( $df=34, p<.001$ ), CFI=.97, TLI=.93, IFI=.97, and the RMSEA=.047. On average at age 25, females were 1.70 ( $b=0.849 \times 2, p<.001$ ) points higher than males on levels of economic pressure. Those who were part of an ethnic/racial minority group were, on average, about one point higher ( $b=1.08, p<.05$ ) on economic pressure. Each unit change in parental SES was associated with about a half point ( $b=-.547, p<.05$ ) average reduction in the initial level of economic pressure. Each full point difference in the individual’s GPA was associated with less initial economic pressure ( $b=-.680, p<.01$ ).

Family structure made no difference in the initial levels of economic pressure. Living in a single parent family relative to living in an intact two-parent family, however, had a significant effect in change over time; there was a larger negative effect on the quadratic slope ( $b=-.089, p<.05$ ). The heightened quadratic effect of living in a single-parent family meant significantly more economic pressure in the center of the age-spectrum compared to those living in intact two-parent families at age 14.

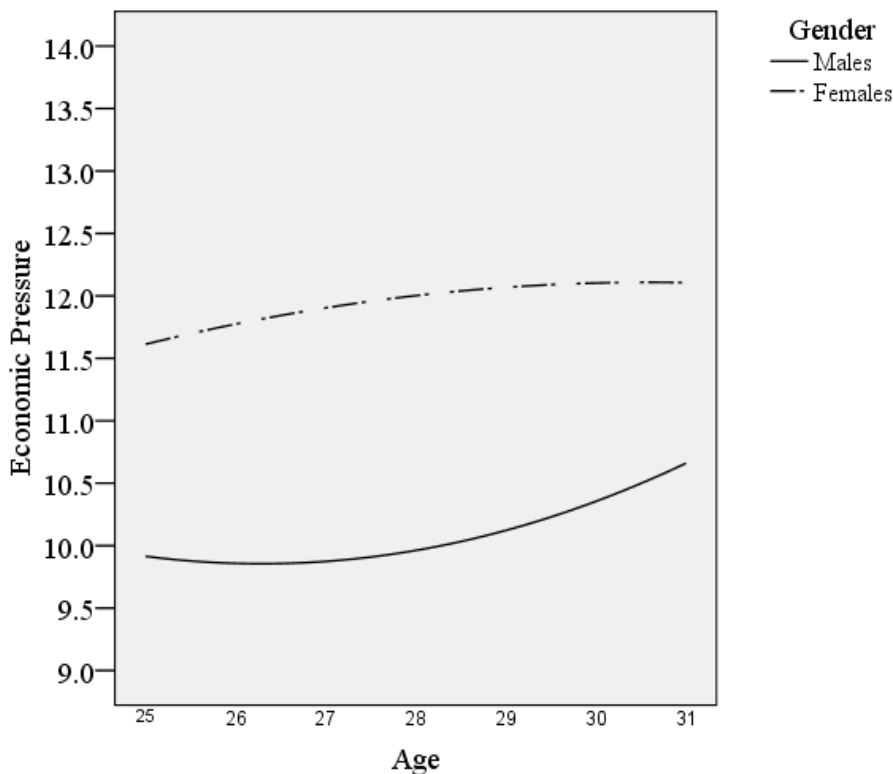


Figure 3. Change in Economic pressure Associated with Gender

Note: (N=732) Based on estimates from Table 2, Model 1. The graph controls for other model predictors

The second model in Table 2 shows the associations of life paths with the trajectories of economic pressure. The model had an acceptable fit with a chi-square of 35.74 ( $df=18, p<.01$ ), CFI=.99, TLI=.98, IFI=.99, and the RMSEA=.037. The intercepts for each of the groups experiencing traditional school-to-work transitions differed from the early parent unmarried reference group; all were significantly lower.

The third model in Table 2 examined whether the associations of background variables with economic pressure were mediated by life paths. This determination was made by comparing changes in coefficients across the two models (with and without the life paths) for changes in magnitude and significance. The effects of two background variables were reduced to nonsignificance with the introduction of life paths. Parent socioeconomic status no longer had a significant effect on economic pressure ( $b=-.329, ns$ ) and GPA no longer had a significant effect ( $b=-.509, ns$ ). These findings along with the findings from Table 3 (selection into life paths), suggested that the effects of parent socioeconomic status and student GPA on economic pressure was transmitted through the influence they had on selection into life paths.

There were several noteworthy findings in these estimates that stood out. Figure 3 shows differences in economic pressure for males and females. The plots controlled for the mean effects of parent socioeconomic status, mean GPAs within each group, and assumed the values for White, non-Hispanics, and intact two-parent family structure. Initial levels of economic pressure shown in this graph were significantly different. Although it appeared that economic pressure for males increased over time relative to that of females which appeared to level off, the differences in these changes over time effects were not statistically significant.

Figure 4 shows estimates for each life path group. Estimates controlled for parental SES, mean GPAs within each group, and assume the values for White, non-Hispanics, and intact two-parent family structure, and used the mean values between males and females. The initial estimated levels of economic pressure were 12.55 for the early parent unmarried group, 12.34 for the early parent married group, 10.70 for the negligible family formation group, 9.88 for the delayed family formation group, and 10.38 for the on-time family formation group.

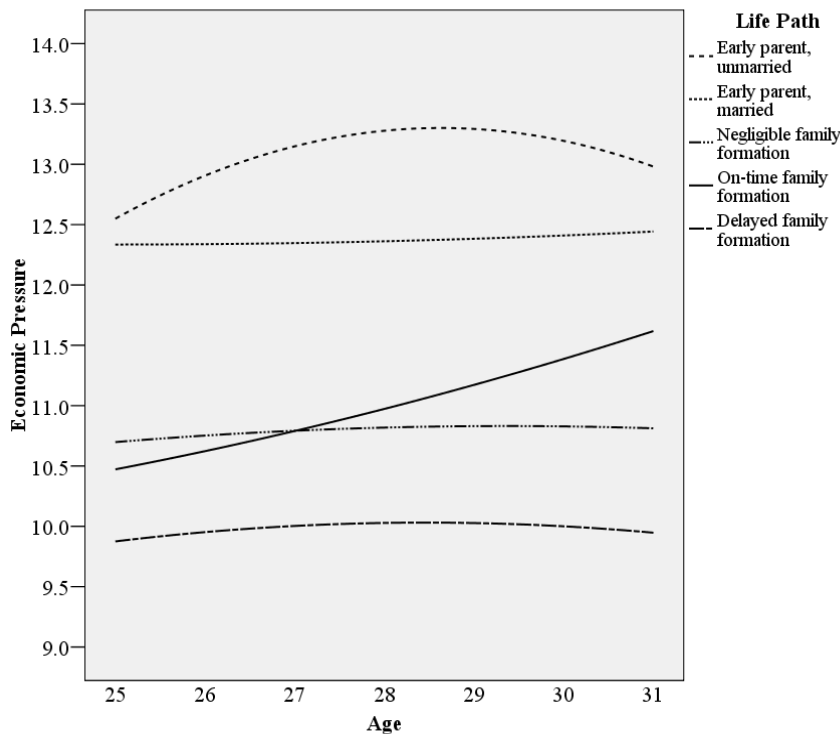


Figure 4. Change in Economic pressure Associated with Life Paths

Note: Based on estimates from Table 2, Model 3. The graph controls for other model predictors

## Discussion and Policy Implications

Societal conditions concentrate risks of economic pressure in early adulthood (Drentea, 2000; Mirowsky & Ross, 1999), this construct was investigated across a stretch of time that bridged the movement of individuals from family-of-origin to family-of-destination. The study considers early life course features that serve as long-range predictors of economic pressure, rather than beginning with economic pressure as an exogenous variable. The result is not only a description of the dynamic changes in economic pressure occurring over time, but an intensive investigation of the ways that ascribed and achieved elements of an individual's background constrain, combine, and condition the effects of individual life paths on the economic experiences participants experienced as they moved into adulthood.

### Freedom and Constraint in Life Path Selection

This study showed that the personal and social selection processes that are at play in distinguishing the life paths that young people followed into adulthood are influenced by the person's childhood background. Females are less likely to delay or have negligible family formation, meaning they were more likely to marry or have children in their 20s. Ethnic and racial minorities are less likely to have on-time and negligible family formation.

Family structure, meaning the marital status of parents when age 14-15, likely plays a role in influencing selection into life paths through its effect on boosting socioeconomic status among parents and the youth's own academic achievement. More research, however, is needed to confirm this conclusion. The findings indicate that parental income and education and the participant's own academic achievement pushed the young adult toward life paths that included school-to-work transitions and later life family formation.

These findings fit well with sociological and family research that argues for social reproduction of socioeconomic status via parent-to-child investments in education (McLanahan & Percheski, 2008). Those with higher grade point averages in high school more often move into life paths where post-secondary education culminates into steady full-time work. These findings also fit well with the life course perspective on transitions to adulthood which emphasize how the linked lives of parents and children are a mechanism for transmitting the social realities of historical periods (Elder, Johnson, & Crosnoe, 2004). For instance, the record rates of post-secondary college enrollment observed in this cohort of young people were based, at least partially, on the socioeconomic levels attained by their parents.

What about the emerging adulthood perspective? From Arnett's (2004) point of view, the expanded interval in early adulthood between residing in the family-of-origin and the family-of-destination gives young people the opportunity to break from the social inequalities of the past and forge new directions in life. In this study, the combined role of gender, ethnic/racial minority status, family structure, parental SES, and GPA only accounted for 18% of the variance in the selection of life paths. Furthermore, background variables, including gender, ethnic/racial minority status, family structure, parent SES, and GPA, did not significantly distinguish the early parenthood groups from each other.

### Economic Pressure

The average person in this study reported an initial "moderate" amount of economic pressure continuing to age 31. This finding is consistent with studies showing similarities in economic pressure for those under 30 and those ages 30-39 (Drentea, 2000; Mirowsky & Ross, 1999). By age 25, most of the transitions that took place in the life paths had already occurred; thus, it was not surprising that levels of economic pressure remained virtually the same across this trajectory.

Images of a stable level of economic pressure resulted in some interesting questions about how individuals respond to economic pressure over a number of years. Keep in mind that economic pressure was a dependent variable in this study and its association with the life paths was contiguous because they were overlapping measures. Yet, why wouldn't some life paths, especially those that seem most economically challenging or facile correspond with rapidly increasing or decreasing levels of economic pressure? Is it possible that individuals, by force of habit or circumstance, compensate to the level of economic pressure they have been accustomed to by changing their expectations or standards of living? For instance, comparatively advantaged individuals who are in a position to reduce the burdens and stress associated with paying bills may simply take on more financial burdens as their income allows. Likewise, the comparatively less advantaged may find increasing economic pressures intolerable and downgrade their housing or quality of consumption to amounts they can manage monetarily and psychologically. Thus, it seems that it could be profitable to combine longitudinal studies of economic pressure with details about



changes in income, assets, expectations, standards of living, and family needs. These could interact in important ways with the life paths of individuals in the transition to adulthood.

The trajectories obscured one of the interesting discoveries about economic pressure that was revealed in the raw mean scores examined over time. A spike in the observed means of economic pressure was observed in 2002 when respondents were age 28. This is an intriguing finding given historical events surrounding this year. In the early 2000s, a stock market crash occurred in the information technology sector, bursting the “dot-com bubble” (Lowenstein, 2004). This was a sector of the economy that young adults were keenly aware of because at that time young people popularized internet technology. This was a recessionary period that increased unemployment rates, particularly for young people. In addition, the terrorist events of September 11, 2001 added to financial difficulty and generally led to perceptions of a troubled economy in America.

These events could have impacted the sample study participants’ levels of economic pressure reported in 2002. In economic crises, young adults may have had fewer opportunities to build assets whereas their older counterparts have already started asset accumulation and may have difficulties holding onto their assets. Early adulthood is also a formative age for economic awareness and these events could have influenced perceptions of economic pressure even if individual incomes were not significantly impacted. It would be interesting to compare this spike in the YDS data with other studies investigating economic pressure during the same time period.

### Policy Implications

Policymakers at community, state, and federal levels who work on issues related to poverty should consider the social-psychological states of those in poor objective economic conditions. Mandates to federal law in 1996 restructured the welfare system in the U.S. into Temporary Assistance for Needy Families (TANF). Most of the large-scale follow-up research assessing the implications of the policy changes has focused on objective outcomes such as poverty levels. More research is needed that investigates the economic pressures in these families because individual perceptions capture the meaning of objective conditions and mediate the effects of outward conditions on personal and relational well-being.

### References

- Arnett, J. J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. New York: Oxford University Press.
- Cohen, P., Kasen, S., Chen, H., Hartmark, C., & Gordon, K. (2003). Variations in patterns of developmental transitions in the emerging adulthood period. *Developmental Psychology, 39*, 657-669.
- Drentea, P. (2000). Age, debt and anxiety. *Journal of Health and Social Behavior, 41*, 437-450.
- Elder, G. H., Jr. (1998b). The life course as developmental theory. *Child Development, 69*, 1-12.
- Elder, G. H. Jr., Johnson, M. K., & Crosnoe (2004). The emergence and development of life course theory. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the life course* (pp. 3-22). New York: Kluwer Academic.
- Eliason, S. R., Mortimer, J. T., Vuolo, M., & Tranby, E. (2009). A sense of timing: the relationship between life course structures in paths to adulthood and subjective perceptions. Unpublished manuscript.
- Galambos, N. L., Barker, E. T., & Krahn, H. J. (2006). Depression, self-esteem, and anger in emerging adulthood: Seven-year trajectories. *Developmental Psychology, 42*, 350-365.
- Koc, I. (2007). The timing of leaving the parental home and its linkages to other life course events in Turkey. *Marriage & Family Review, 42*, 29-47.
- McLanahan, S., & Percheski, C. (2008). Family structure and reproduction of inequalities. *Annual Review of Sociology, 34*, 257-276.
- Mirowsky, J., & Ross, C. E. (1999a). Economic hardship across the life course. *American Sociological Review, 64*, 548-569.
- Mortimer, J. T. (2003). *Working and growing up in America*. Cambridge, MA: Harvard University Press.
- Mulder, C. H., & Clark, W. A. V. (2002). Leaving home for college and gaining independence. *Environment and Planning, 34*, 981-999.
- Schulenberg, J. E., Bryant, A. L., & O'Malley, P. M. (2004). Taking hold of some kind of life: How developmental tasks relate to trajectories of well-being during the transition to adulthood. *Development and Psychopathology, 16*, 1119-1140.

**Acknowledgements**

The Youth Development Study is supported by a grant, “Work Experience and Mental Health: A Panel Study of Youth,” from the National Institute of Child Health and Human Development (HD44138). It was previously supported by the National Institute of Mental Health (MH42843). The content of this paper is solely the responsibility of the authors and does not represent the official views of the National Institute of Child Health and Human Development or the National Institutes of Health.