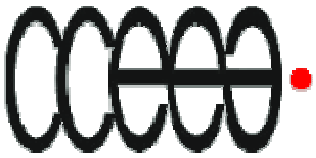

Universidad de la República

Facultad de Ciencias Económicas y de Administración

Maestría en Economía

Adolescent´s Self-Esteem. The Role of Family

Luis Guani

Tutor:

Alejandro Cid

Montevideo, Uruguay

2011

PÁGINA DE APROBACIÓN

FACULTAD DE CIENCIAS ECONÓMICAS Y DE ADMINISTRACIÓN

El tribunal docente integrado por los abajo firmantes aprueba la Tesis de Investigación: Adolescent´s Self-Esteem. The Role of Family

Autor: Luis Guani

Tutor: Alejandro Cid

Carrera: Maestría en Economía

Puntaje:.....

Tribunal

Profesor:.....Firma:.....

Profesor:.....Firma:.....

Profesor:.....Firma:.....

Fecha:

A mi hermana María Pía

Agradecimientos

Quiero agradecer a Alejandro Cid, por su dedicación y por los conocimientos transmitidos, a José María Cabrera por los aportes realizados, a Virginia Peyrot por el tiempo dedicado en ayudarme a corregir el trabajo y a Madelón Latourrette por ayudarme con las correcciones finales.

Contents

Resumen

La literatura previa ha encontrado que el soporte social de los adolescentes tiene impacto en su autoestima y en su satisfacción con la vida.

Este trabajo pretende contribuir a la literatura evaluando el impacto de la estructura familiar, como parte del soporte social de los adolescentes, sobre la autoestima de los mismos, abordando el problema de endogeneidad mediante el empleo de una variable instrumental y *propensity score matching*. El estudio se realiza sobre una muestra de 2.205 individuos de entre 12 y 18 años. Se encontró que vivir con ambos padres mejora la autoestima de los adolescentes y su satisfacción con la vida. Con el fin de guiar futuras investigaciones sobre heterogeneidad en la autoestima de la población adolescente, también el presente trabajo muestra indicios de que las mujeres parecen tener menor autoestima y menor satisfacción con la vida que los varones. Por último, se sugieren algunas orientaciones de política.

Abstract

Previous literature has found that social support impacts in adolescents´ self-esteem and their life satisfaction. The contribution of this study is to evaluate the impact of family structure –as a part of social support- on adolescents´ self-esteem, addressing the endogeneity problem by employing an instrumental variable approach and propensity score matching. A sample of 2,205 young individuals shows that living with both parents improves adolescents´ self-esteem and their life satisfaction. It is also showed that girls have lower self-esteem and life satisfaction than boys: this finding could guide further research on the heterogeneity of self-esteem among adolescentes. Finally some guidance for policy is suggested.

Introduction

Over the past fifty years, most of the developed world has experienced dramatic changes in organization of families (Lundberg & Pollak, 2007). One of the most important changes at family level is the increase in the proportion of children raised outside two-parents´ homes. Scientists have expressed their concern about the effects of those family changes on other members of society, especially adolescents (McLanahan, 1985).

Firstly, this paper wants to find if living with both parents has a significant effect in adolescent´s self-esteem, and secondly, if living with both parents has a significant effect in adolescent´s life satisfaction in order to intuit that self-esteem could be playing a mediator role within the effect of living with both parents in adolescent´s life satisfaction.

Kong and You (2011) suggested that social support promotes higher levels of life satisfaction with self-esteem as a mediator. *"A mediator is the mechanism through which a predictor influences an outcome variable"* (Kong and You, 2011). The contribution of this paper is to evaluate the effect of living with both parents -a component of social support- in adolescent´s self-esteem as a path to life satisfaction. Family structure could be such an important element on adolescents´ social support, that living with both parents, even without the contribution of other element of adolescents' social support, could increase the levels of life satisfaction, with the mediation of self-esteem.

Backgrounds

Uruguay is an interesting case among Latin American countries, for examining the impact of family structure in adolescents´ self-esteem and life satisfaction. Uruguay experienced fairly rapid development and modernization, especially compared with other South American nations (Díaz, 2003). In the 1980s, Uruguay emerged from a period of dictatorship to renew the democracy it had forged when it won its independence. With a new democratic regime, modern and progressive ideals emerged (Paredes, 2003). Additionally, Uruguay has an unusual secular population compared with the rest of Catholic-dominated Latin American countries (Guigou, 2006). Thus, Uruguay experienced several family transitions before its neighbours did.

In the late eighties, the marriage rate declined while divorces became common; birth rates are among the lowest rates in South America, and nearly a 25% of the children live with only one of their biological parents (Observatorio de la Familia, 2010). According to Bucheli and Vigna (2005), divorce wasn´t a common practice until the second half of the eighties in Uruguay, and the decline in the number of marriages promoted cohabiting, where couples could easily dissolve their commitment. The number of divorces grew from 2,967 in 1984 to 14,300 in 2004, and marriages dropped from 20,192 to 11,080 in the period 1984-2009 (*Instituto Nacional de Estadística* [INE], 2011).

The changes registered in the organization of the family in the last fifty years have inspired a large body of social scientific research. The structure of the

family seems to have many consequences over adolescent´s feelings and behaviours, contributing to a thriving childhood (Carter, 2003). Thus, family structure could be hypothesized as an important part of adolescents´ social support.

The stability of family structure could be such that the interaction between adolescents and parents may have a positive impact on adolescents´ emotional development. Previous literature shows that adolescents that live with single parents, report higher levels of school misconduct, general conduct disorder, depressive symptoms and increased parent-child conflict (Zeiders, Roosa & Tein, 2010). Also, adolescents raised by single parents are more likely to perform poorly in school, to have deviant sex behaviour, to smoke, to be drug consumers, to engage in criminal acts (Jaynes, 2001; Antecol & Bedard, 2007), and to report lower levels of self rated health (Heard, Gorman & Kapinus, 2008).

A series of studies found that living with both parents is associated with higher levels of adolescents´ life satisfaction (Çıvıtcı, Çıvıtcı & Fıyakali, 2009; Robson, 2009; VanderValk, Spruijt, de Goede, Maas & Meeus, 2005; Zullig, Valois, Huebner & Drane, 2005; Williams, 2001). However, it should be taken into consideration that adolescents living in intact families which have high exposure to parent's conflicts, are less socially adapted than those living in non intact families that have less exposure to conflicts; thus living in a conflictive environment seems to be an important variable in youth development (Estela Retana-Franco & Sánchez Aragón, 2010). The level of conflict on parent's marriage is important in adolescents´ development, i.e. staying in intact families

with higher levels of conflict leads to worse outcomes than living in unconflicted non intact families, and high conflictive marriages generally lead to divorce (Musick, Bumpass & Meier, 2006).

Adolescent self-esteem could be seen as a part of the personality system. Adolescents with high self-esteem are more prepared to face potential problems (Gerard & Buehler, 2004), and they could be happier than the ones with low self-esteem. Robson (2009) states that adolescents within single parent families report lower levels of self-esteem: parent´s marital instability seems to be among the important risk factors for adolescent development, and risk factors are associated to low self-esteem. Children feel the stigma of parents´ separation; they may feel alienated so this can even affect their mental health (The Institute for American Values, 2005; Robson, 2009). Çıvıtcı, Çıvıtcı and Fıyakali (2009) also state that family reorganization causes stress which impacts on children´s behaviour, and affects some emotional states like self-esteem. Additionally, according to the hope theory, children with higher expectations report higher levels of family cohesion, are more satisfied with their life, and report higher levels of self-esteem (Merkas & Brajsa Zganec, 2011).

A series of studies have identified self-esteem as a mediator that explains underlying mechanisms which determine life satisfaction (Kong & You, 2011; Simsek, 2011). *"Self-esteem is hypothesized as an important mediator because individuals with extremely low social support would rarely be satisfied with*

themselves and more likely result in low self-esteem, which would significantly exacerbate their psychological well being" (Kong & You, 2011).

Social theory suggests a number of possible mechanisms that could explain empirical relationship between family structure and adolescents´ self-esteem. Firstly, adolescents raised outside two-parent homes are more likely to be exposed (or have been exposed) to different conditions than those who haven't, which may influence their self-esteem. These conditions are: a relative lack of access to material and emotional resources, and a greater instability or conflict. In terms of resources, adolescents raised outside two-parent home may lack of economic resources, adults supervision and emotional support. The decline in parental resources after divorce or separation does not appear to be limited to financial assets: single or divorced parents may spend less time with their children than two-parent families (Robson, 2009).

A second way, in which non-traditional family structure may be negatively related to self-esteem, is that non-traditional family structures could cause emotional distress, worse communication and high residential mobility. Jiménez, Murgui, Estevez & Musitu (2007) state that good communication with parents impacts on young people's self-esteem, acting as a protection for adolescents behaviours. In presence of communication problems between parents and their children, adolescent´s self-esteem is affected. Marriage increases parent's likelihood to have a good relationship with their children, and living with only one parent makes their relationship with the other parent less private (The Institute for American Values, 2005). Intact families seem to

promote better quality relationships between parents and their children. Parents living together may be related to a happier, healthier and less violent relationship, creating a more lovely and committed relationship with their children (The Institute for American Values, 2005; Evans & Kelley, 2004).

A third way in which non-traditional family structure may be negatively related to self-esteem is through the downward social mobility theory. This theory states that when parents get divorced, children often lose the parent with the highest educational attainment and higher social position. This is associated to children aspirations, and aspirations are supposed to be associated with well being, particularly with self-esteem (Robson, 2009).

All of those theoretical mechanisms may also be present in Uruguayan families and adolescents. Thus, especially in the light of the concurrent trends of family decline, it makes sense to examine a possible causal linkage between family structure and self-esteem.

Methodology

The gold standard to test these hypotheses would be a randomly controlled trial that balances observed and unobserved characteristics between those who live with both parents, and those who do not. When the treatment[1] is randomly

[1] Living with both parents

assigned by a lottery, different outcomes between both groups could be endorsed to the treatment they received. In the absence of randomization, the treatment and the corresponding outcome could be jointly determined, and changes in outcomes may reflect unmeasured differences between individuals in the treatment and control groups.

Because this study employs a non-randomized observational design, the present analysis uses Instrumental Variables (IV) estimation, and secondly, estimates the treatment effects based on propensity score. These are econometric techniques designed to address selection bias.

Data

The data used in the analysis comes from the National Survey of Adolescents and Youth (*Encuesta Nacional de Adolescencia y Juventud*, [ENAJ]). ENAJ is a cross section survey conducted by INE in 2008 as an initiative of the Uruguayan Ministry of Social Development. The target population is 12 to 29 year-old people living in towns of more than 5,000 people in Uruguay. The data of this sample -5,017 individuals- was collected between February and May of 2008. Adolescents and young people were questioned on various subjects including the following modules: household composition, education, migration, labour, adolescents general opinions, participation, health, nutrition, affective relationship, sexual relationship, law conflicts, discrimination, and free time & interests.

In this paper, data is restricted to consider 12 to 18 year-old adolescents, reducing the sample to 2,205 cases. The sample is reduced because the composition of the household of older people is affected by the incidence of young people leaving parents´ home to study in the capital of Uruguay (Montevideo) or to have their own home. This reduction of the sample ensures that the vast majority of teens are living in parents´ home.

Table 1 shows the descriptive statistics of variables used in this study. All variables have 2,205 observations, so there is no missing data.

The participants of the survey are 12 to 18 years-old people, with a mean age of 14.92. 80.5% are of white race only, and 19.5% are of other race or mixed races. 51.7% of respondents are boys. 41.3% of surveyed adolescents live in Montevideo.

94.3% of adolescents are in agreement with their way of being, so in general they have high self-esteem. 94.1% of adolescents are satisfied with their families, and 54.6% of them are satisfied with their life. The happiness index –in units akin standardized happiness scores- is 0.188 on a scale from -2.476 to 0.837. 57.9% of adolescents live with both parents and 42.1% with only one or none.

Table 1: Definition and Description of Variables

Variable	Description variables	Obs	Mean	S.D.	Min	Max
Satisfaction with family	´=1 if the adolescent is satisfied with the relationship with their parents, and 0 otherwise	2205	0.941	0.235	0	1
Satisfaction with life	´=1 if the adolescent is satisfied with their life in general, and 0 otherwise	2205	0.546	0.498	0	1
Happiness Index	Happiness index as a function of: sadness in last 12 months; loneliness in last 12 months and worries in last 12 months	2205	0.188	0.670	-2.476	0.837
Self -Esteem	´=1 if the adolescent is in agreement or very in agreement with their way of being, and 0 otherwise	2205	0.943	0.231	0	1
Both Parents	´=1 if the adolescent lives with both parents, and 0 otherwise	2205	0.579	0.494	0	1
Age	Adolescent´s age	2205	14.917	1.988	12	18
Women	´=1 if the adolescent is female, and 0 otherwise	2205	0.483	0.500	0	1
Only white	´=1 if the adolescent is of white race only with no mixed race, and 0 otherwise	2205	0.805	0.397	0	1
Montevideo	´=1 if the adolescent lives in Montevideo, and 0 otherwise	2205	0.413	0.493	0	1
educ_mother_primary	´=1 if their mother completed at most primary education, and 0 otherwise	2205	0.393	0.489	0	1
educ_mother_cbasico	´=1 if their mother completed at most three years of secondary education, and 0 otherwise	2205	0.297	0.457	0	1
educ_mother_bachiller	´=1 if their mother completed at most six years of secondary education, and 0 otherwise	2205	0.151	0.358	0	1
educ_mother_tertiary	´=1 if their mother completed tertiary education, and 0 otherwise	2205	0.088	0.283	0	1
educ_father_primary	´=1 if their father completed at most primary education, and 0 otherwise	2205	0.393	0.489	0	1
educ_father_cbasico	´=1 if their father completed at most three years of secondary education, and 0 otherwise	2205	0.304	0.46	0	1
educ_ father _bachiller	´=1 if their father completed at most six years of secondary education, and 0 otherwise	2205	0.124	0.329	0	1
educ_ father _tertiary	´=1 if their father completed tertiary education, and 0 otherwise	2205	0.060	0.237	0	1
Lunch with Parents	How many days per week does adolescents have a meal with one or both parents	2205	5.592	2.415	0	7
Region	´=1 if the adolescent lives in Montevideo, 2 in the north, 3 in the central north, 4 in the central south and 5 in the south of the country	2205	-	-	1	5
PC Income	per capita income in Uruguayan pesos	2205	7058.82	6760.04	166.67	92550
Religion	´=1 if the adolescent is atheist or agnostic, and 0 otherwise.	2205	0.164	0.371	0	1
Mother Education	Ten ordinal categories of education grade.	2205	4.174	-	1	10
Father Education	Ten ordinal categories of education grade.	2205	3.759	-	1	10
Crime Context	Crime context at school index as a function of: violence between students or others, alcohol and drug consumption, and drug sales	2205	1.584	1.696	0	6
Crime Neighbourhood	´=1 if the adolescent lives in a insecure neighbourhood, and 0 otherwise	2205	0.500	0.500	0	1
Use Ilegal Drugs	´=1 if the adolescent ever used illegal drugs, and 0 otherwise	2205	0.096	0.295	0	1
In Prison	´=1 if the adolescent was in prison, and 0 otherwise	2205	0.066	0.248	0	1

The highest level of education for both parents prevails at primary level, and less than 25% of them have completed 6 years of secondary education. Adolescents´ mothers are on average more educated than fathers. 39.3% of both parents haven´t completed primary education, and 8.8% of mothers and 6.0% of fathers have completed tertiary education. Adolescents have at least one meal with one or both parents, 5.59 days per week. Finally, the mean of their per capita income is $7058.82, 16.4% of them are atheist or agnostic, 9.6% use illegal drugs at least once, 6.6% have been in prison, and half of them live in an insecure neighbourhood.

Outcomes

The outcomes used in this paper are: self-esteem and three proxies of life satisfaction. All outcomes were constructed on the basis of the adolescent´s responses to ENAJ survey.

SELF-ESTEEM

The first outcome is self-esteem, which takes the value of 1 if the adolescent is in strong agreement or in agreement with their way of being, and 0 if it is in disagreement or in strong disagreement.

Table 2 shows the mean values of some characteristics of low and high self-esteem adolescents, and the p-value of the t-test for each variable. Self-esteem is significantly different between the two groups at 1% level for the variable

living with both parents. Among the adolescents with high self-esteem, 59% of them live with both parents, while the mean for adolescents with low self-esteem is 47%.

Table 2: Difference of means Self-Esteem

Variable	Low Self-Esteem		High Self-Esteem		t - test
	mean	Sd	mean	sd	p - value
Both parents	0.47	0.501	0.59	0.493	0.000
Age	15.17	1.929	14.90	1.991	0.000
Women	0.62	0.488	0.47	0.499	0.000
Only_white	0.77	0.424	0.81	0.395	0.037
Montevideo	0.41	0.493	0.41	0.493	0.378
educ_mother_primary	0.44	0.498	0.39	0.488	0.079
educ_mother_cbasico	0.30	0.458	0.30	0.457	0.247
educ_mother_bachiller	0.07	0.260	0.16	0.362	0.011
educ_mother_tertiary	0.05	0.215	0.09	0.287	0.008
educ_father_primary	0.43	0.497	0.39	0.488	0.149
educ_father_cbasico	0.25	0.434	0.31	0.462	0.000
educ_ father _bachiller	0.14	0.344	0.12	0.329	0.365
educ_ father _tertiary	0.03	0.177	0.06	0.240	0.044
Lunch with parents	4.90	2.876	5.63	2.379	0.000

Also, results in table 2 also show that adolescents with high self-esteem are younger, white and men in a greater proportion, have mothers more educated, and have lunch with their parents more frequently.

SATISFACTION WITH LIFE

The second outcome measures adolescent's life satisfaction; it takes the value of 1 if the adolescent reported being very satisfied or satisfied with life, and 0 if they reported indifference, dissatisfaction or being very dissatisfied with life. Life satisfaction and happiness are both equally used to measure well being (Kahneman and Krueger, 2006). Life satisfaction is also the most stable indicator of subjective well being (Proctor, Linley and Maltby, 2009).

Table 3 shows the mean values of some characteristics of satisfied and dissatisfied adolescents, and the p-value of the t-test for each variable. Satisfied adolescents live with both biological parents in a higher proportion, are younger and predominately white, are men in a greater percentage, have mothers more educated, and have lunch with their parents more frequently.

Table 3: Difference of means general satisfaction with life

	Unsatisfied		Satisfied		t - test
Variable	mean	sd	mean	sd	p - value
Both parents	0.45	0.498	0.60	0.490	0.000
Age	15.32	1.953	14.84	1.986	0.000
Women	0.55	0.498	0.47	0.499	0.045
Only_white	0.80	0.400	0.81	0.396	0.007
Montevideo	0.46	0.499	0.41	0.491	0.044
educ_mother_primary	0.42	0.494	0.39	0.488	0.066
educ_mother_cbasico	0.33	0.470	0.29	0.454	0.579
educ_mother_bachiller	0.10	0.306	0.16	0.366	0.013
educ_mother_tertiary	0.06	0.237	0.09	0.291	0.010
educ_father_primary	0.43	0.495	0.39	0.487	0.022
educ_father_cbasico	0.27	0.447	0.31	0.463	0.045
educ_ father _bachiller	0.12	0.321	0.13	0.331	0.478
educ_ father _tertiary	0.04	0.207	0.06	0.242	0.001
Lunch with parents	4.88	2.784	5.72	2.320	0.000

SATISFACTION WITH FAMILY

The third outcome used in this paper measures satisfaction with family; it takes the value of 1 if the adolescent reported being very satisfied or satisfied, and 0 if they reported indifference, dissatisfaction or being very dissatisfied.

HAPPINESS INDEX

The forth outcome used in this paper is a happiness index, constructed following the procedure used by Kling, Liebman and Katz (2007). This overall

index is defined to be the equally weighted average of z-scores of its components, with the sign of each measure oriented[2] so that more beneficial outcomes have higher scores. The z-scores are calculated by subtracting the control group[3] mean, and dividing it by the control group standard deviation. The index was constructed with the following three questions of the survey:

1. During the last twelve months: How often have you felt lonely?
2. During the last twelve months: How often have you been so worried that you could not sleep at night?
3. During the last twelve months: Have you ever felt so sad or hopeless during two or more weeks, so that you stopped doing your usual activities?

Instrumental Variables (IV)

For identification reasons, the application of IV techniques requires the use of at least one variable or "instrument"[4] that is correlated with the potentially endogenous explanatory variable -in this case, *living with both parents*- but not significantly related to the outcome, with the objective of overcoming measurement errors and omitted variables jointly affecting treatment variables and outcomes (Angrist & Krueger, 2001; Angrist & Pischke, 2008).

[2] Summary Index = (- loneliness - worried - sad) /3, all components built as z-scores.
[3] Using the terms of an experimental approach, by analogy, in the "treatment" group are those adolescents who live with both parents; in the "control" group are the other adolescents.
[4] Only one instrument is used in this study

The instrument selected was the variable *lunch with parents*, that is, how many days per week they share a meal with at least one parent. The instrument used in this section corresponds to the survey question: “in the last seven days, how many days did you have breakfast, lunch or dinner with at least one of your parents?” This variable verifies the requirements for being a good instrument: being arguably exogenous to the outcomes, and significantly correlated to the treatment variable. Frequency of having lunch with parents (the instrument) and adolescent’s self-esteem (the outcome) are not supposed to be correlated a priori, while the variable *living with both parents* (the *treatment*) and the instrument variable -*lunch with parents*- are both supposed to be correlated, because having both parents at home increases the likelihood of having meals with one of them compared to having only one parent at home. First-stage estimates are shown in Table 4. The point estimate of the coefficient on variable *lunch with parents* is positive and significantly different from zero.

Table 4: First-stage regression

	Dependent Variable: Both Parents
Lunch with Parents	0.418***
	(0.004)
Observations	2,205

Notes: Standard errors are in parentheses. ***Significant at the 1% level.

The goal of this work is to identify if there is a relation between living with both parents and adolescent´s self-esteem and between living with both parents and life satisfaction. The outcomes used in this paper are: self-esteem and three proxies of life satisfaction. Single-equation OLS models were first used to estimate the relationship between the treatment variable (living with both

parents) and the selected outcomes (self-esteem and life satisfaction proxies). Four general equations were specified, one to measure the impact of living with both parents on self-esteem, and three to measure the impact of living with both parents on life satisfaction proxies. The general estimating equation is:

$$Y_{fi} = \alpha_0 + \alpha_1 T_i + \sum \alpha_j x_{ji} + u_i \qquad (1)$$

Y_{fi} is the outcome, where f refers to each of the four outcomes managed on this paper. T_i is the treatment variable: *living with both parents*. The control variables are represented by x_{ji}, where j refers to the control variables used. Three groups of control variables are managed: the first regression with none control variables; the second one uses age, gender and race; and the third one uses age, gender, race, parent´s education and region. Finally α_0, α_1 and α_j are a set of coefficients to be estimated and u_i is a random error term. All regressions were studied using standard errors and robust standard errors.

As this study use a non randomized observational design, unobserved or omitted variables could be jointly affecting *living with both parents* (the *treatment*) and the outcomes. Hence, to deal with potential problems of endogeneity, we also employ an instrumental variable approach.

The instrument selected in this paper is the variable *Lunch with parents*, as it has previously seen this variable may have the characteristics of a good instrument.

The method used to calculate IV estimates was Two Stage Least Squares (TSLS). In the first stage, the endogenous variable is regressed on the instrument, and in the second stage the outcomes are regressed on the predicted values of the first stage. The IV estimation for the four outcomes using TSLS method included the following equations:

$$T_i = \delta_0 + \delta_1 Z_i + \Sigma \delta_j x_{ji} + v_i \qquad (2)$$

$$Y_{fi} = \beta_0 + \beta_1 T^*_i + \Sigma \beta_j x_{ji} + \varepsilon_i \qquad (3)$$

Where Z is the instrumental variable used, T^*_i is the predicted value of the treatment variable from the first stage reduced form regressions, δ_0, δ_1, δ_j, β_0, β_1 and β_j are a set of coefficients to estimate, and ε_i and v_i are random error terms.

For each outcome, regressions were specified using two groups of control variables: the first one used all control variables (age, gender, race, parents' education and region), and the second one used none. As in OLS analysis, regressions were studied using standard errors and robust standard errors.

Propensity Score Matching

IV approaches are dependent on the assumption that the chosen instrument is valid, a validity which is difficult to establish conclusively. Thus, propensity score matching is also used to introduce more robustness into the analysis.

Propensity score matching, like the IV approach, seeks to identify causal linkages, but is not dependent upon the same assumptions.

The typical dilemma in treatment evaluation involves the inference of a causal association between the treatment and the outcome. Thus, we observe (yi, xi, Di), i=1,..., N, where yi are self-esteem and life satisfaction proxies, xi represents the regressors, and Di is the treatment variable which takes the value 1 if the treatment is applied (living with both parents) and 0 otherwise. The impact of a hypothetical change in D on y, holding x constant, is of interest. But no individual is simultaneously observed in both states. Moreover, the sample does not come from a randomized social experiment: it comes from observational data and the assignment of individuals to the treatment and control groups is not random. Hence, the treatment effects are estimated based on propensity score. This approach is a way to reduce the bias performing comparisons of outcomes using treated and control individuals who are as similar as possible. The propensity score is defined as the conditional probability of receiving a treatment given pre-treatment characteristics:

$$p(X) = Pr\{D = 1 \mid X\} = E\{D \mid X\}$$

Where D = {0, 1} is the indicator of exposure to treatment and X is the vector of pretreatment characteristics.

In this research, the propensity score was estimated using a Logit model, and corroborated using a Probit model.

Since the probability of observing two units with exactly the same value of the propensity score is, in principle, zero because *p(X)* is a continuous variable, various methods have been developed to match comparison units sufficiently close to the treated units. So, after estimating *p(X),* the Kernel Matching method is used.

Results

Tables 5 and 6 show the results for the single equations estimation. The tables display coefficients and standard errors (in parentheses) which were computed at the sample means, using robust standard errors. Regressions where controlled by demographic variables such as adolescents gender, age, race and region and dummies variables for parents education. Using more control variables is not always good; variables that could be outcomes by themselves are bad controls; good controls are variables that were fixed at the time the variable of interest was determined (Angrist & Pischke, 2008). This is the case of the variables used as controls in this paper.

Living with both parents predicts significantly self-esteem (using robust standard errors) at 1% level without using control variables (Model 1), at 5% level using some controls (Model 2) and at 10% level using all controls variables (Model 3). Also the three models are significant at 5% level using standard errors. All

coefficients have positive sign as expected. Living with both parents raises self-esteem in the order of 2%.

Table 5
OLS Regression – The Impact of Family Structure on Self-Esteem and Happiness Index

	Self-Esteem			Happiness Index		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Both Parents at Home	0.0248***	0.0227**	0.0204*	0.158***	0.131***	0.122***
	(0.0103)	(0.0102)	(0.0104)	(0.0292)	(0.0279)	(0.0288)
Age	No	Yes	Yes	No	Yes	Yes
Gender	No	Yes	Yes	No	Yes	Yes
Race	No	Yes	Yes	No	Yes	Yes
Parents education	No	No	Yes	No	No	Yes
Region	No	No	Yes	No	No	Yes
Observations	2,205	2,205	2,205	2,205	2,205	2,205

Note: Robust Standard Errors; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Three outcomes are used to analyze the relation between living with both parents and life satisfaction. The results for the first outcome (happiness index) are shown in table 5. All three models report a significant impact of living with both parents on adolescents' self-esteem at 1% level, with positive sign as expected, using robust standard errors. Similar results are obtained using standard errors. Living with both parents raises happiness (measured by the happiness index) approximately 0.140 standard deviation in comparison with the control group[5]. The results for satisfaction with family and satisfaction with life are shown in table 6; for both variables, the models report a significant impact of living with both parents on satisfaction with life and family at 1% level using robust standard errors or standard errors. All coefficients have positive sign as expected, and living with both parents raises adolescents´ satisfaction

[5] The absolute magnitudes of the indices are in units akin to standardized happiness scores: the estimates shows where the mean of the treatment group is in the distribution of the control group in terms of standard deviation units.

with family in the order of 5%, and adolescents´ satisfaction with life in the order of 8%. In summary, the relation between living with both parents and life satisfaction is significant at 1% level with positive sign for all models of all outcomes, using robust standard errors or standard errors.

Table 6
OLS Regression - The Impact of Family Structure on Adolescents Satisfaction

	Satisfaction with Family			Satisfaction with Life		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Both Parents at Home	0.0533***	0.0498***	0.0500***	0.0808***	0.0759***	0.0726***
	(0.0107)	(0.0106)	(0.0107)	(0.0159)	(0.0159)	(0.0162)
Age	No	Yes	Yes	No	Yes	Yes
Gender	No	Yes	Yes	No	Yes	Yes
Race	No	Yes	Yes	No	Yes	Yes
Parents education	No	No	Yes	No	No	Yes
Region	No	No	Yes	No	No	Yes
Observations	2,205	2,205	2,205	2,205	2,205	2,205

Note: Robust Standard Errors; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Previous estimations of the association of living with both parents with self-esteem, and of living with both parents with life satisfaction could be biased by selection effect, so IV results should provide more reliable estimates than OLS regressions.

Table 7 reports the results for the IV estimation. After addressing selection through the IV models, the treatment variable –living with both parents- has a positive and statistically significant effect on self-esteem and life satisfaction outcomes.

Living with both parents at home significantly predicts self-esteem (using robust standard errors) at 1% level without using control variables (Model 1) and at 5% level using all control variables (Model 2). Using standard errors living with both parents is significant at 1% level in both models. Living with both parents (using *lunch with parents* as instrument) raises self-esteem in the order of 15%.

The three outcomes used to analyze the relation between living with both parents and life satisfaction are significant at 1% level, with positive sign as expected at both models (Model 1 and Model 2) in all cases. Similar results are registered using robust standard errors and standard errors. Using *lunch with parents* as instrument, living with both parents raises happiness (measured by happiness index) in the order of 1 standard deviation in comparison with the control group[6], satisfaction with family in the order of 36%, and satisfaction with life in the order of 40%.

Table 7
Instrumental Variable TSLS Regression - The Impact of Family Structure on Self-Esteem and Satisfaction

Instrument: Lunch with Parents								
	Self-Esteem		Happiness Index		Satisfaction with Family		Satisfaction with Life	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Both Parents at Home	0.156***	0.136**	1.156***	0.937***	0.370***	0.355***	0.430***	0.381***
	(0.0581)	(0.0614)	(0.187)	(0.181)	(0.0727)	(0.0761)	(0.0896)	(0.0953)
Age	No	Yes	No	Yes	No	Yes	No	Yes
Gender	No	Yes	No	Yes	No	Yes	No	Yes
Race	No	Yes	No	Yes	No	Yes	No	Yes
Parents education	No	Yes	No	Yes	No	Yes	No	Yes
Region	No	Yes	No	Yes	No	Yes	No	Yes
Observations	2,205	2,205	2,205	2,205	2,205	2,205	2,205	2,205

Note: Robust Standard Errors; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

[6] The absolute magnitudes of the indices are in units akin to standardized happiness scores: the estimates shows where the mean of the treatment group is in the distribution of the control group in terms of standard deviation units.

As it was previously mentioned, IV approach is dependent on the assumption that the chosen instrument is valid, a validity which is difficult to establish conclusively. Thus, as it was previously mentioned propensity score matching is also used to introduce more robustness into the analysis.

Table 8
Average Effect (on Self-Esteem, Satisfaction with Life and Family, and on Happiness Index) of Treatment (Living with both Parents) on the Treated (ATT)

	Self-Esteem	Satisfaction with Life	Satisfaction with Family	Happiness Index
ATT	0.018*	0.072***	0.045***	0.108***
n. treated	1,276	1,276	1,276	1,276
n. controls	929	929	929	929
Treated	0.954	0.882	0.964	0.255
Controls	0.936	0.810	0.919	0.147
S.E.	0.011	0.016	0.011	0.030
t-stat	1.71	4.34	4.08	3.58

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

The point estimates indicate that living with both parents increases self-esteem, happiness, and satisfaction with family and with life. The ATT, with self-esteem as outcome, is positive, and significantly different from zero at the 10% level, and at the 1% level in the life satisfaction proxies' cases. The propensity score was estimated using a Logit model, and was corroborated using a Probit model[7]. Thus, using the propensity score and the Kernel matching method, there is some evidence to support that living with both parents has a positive influence on self-esteem and life satisfaction.

In order to evaluate the goodness of the matching, we should take in consideration that the matching method intends to make comparisons between treated and control individuals who are as similar as possible. This similarity between the treated and control individuals can be seen in the mean

[7] Results mentioned but not shown are available from the authors upon request.

comparison test (t-test) in Table 9. There is no statistically significant difference in the characteristics of the treated and control matched individuals. This fact denotes that the matching is correct.

Table 9
Descriptive Statistics for the Treated, not Treated and Matched Groups. Adolescents with 12 to 18 years old.

		Mean		bias		t - test	
Variable	Sample	Treated	Control	%bias	%reduct (bias)	t	p>|t|
Age	Unmatched	18.052	21.407	-68.1		-23.64	0.000
	Matched	14.814	14.809	0.1	99.9	0.06	0.951
Women	Unmatched	0.4609	0.5399	-15.9		-5.56	0.000
	Matched	0.4679	0.4656	0.4	97.2	0.11	0.910
Region	Unmatched	26.207	2.493	7.6		2.66	0.008
	Matched	26.889	26.716	1.0	86.5	0.26	0.795
PC income	Unmatched	8652.7	8071.7	6.6		2.36	0.018
	Matched	7243.9	7012.7	2.6	60.2	0.87	0.383
Mother Education	Unmatched	4.315	39.398	15.4		5.42	0.000
	Matched	42.798	41.978	3.4	78.1	0.86	0.391
Father Education	Unmatched	40.287	35.353	20.8		7.30	0.000
	Matched	39.467	38.223	5.3	74.8	1.35	0.178
Religion	Unmatched	0.1718	0.1969	-6.5		-2.27	0.023
	Matched	0.1599	0.1580	0.5	92.6	0.13	0.898
Only White	Unmatched	0.8314	0.8293	0.6		0.20	0.841
	Matched	0.8151	0.8137	0.4	35.4	0.09	0.928
Crime Context	Unmatched	10.783	0.5476	37.1		13.20	0.000
	Matched	16.795	16.504	2.0	94.5	0.43	0.666
Crime Neighbourhood	Unmatched	0.4919	0.5109	-3.8		-1.33	0.184
	Matched	0.4820	0.4886	-1.3	65.0	-0.34	0.738
Use Ilegal Drugs	Unmatched	0.177	0.2701	-22.4		-7.77	0.000
	Matched	.07445	0.0716	0.7	96.9	0.28	0.779
In Prison	Unmatched	0.0945	0.1589	-19.4		-6.72	0.000
	Matched	0.0533	0.0541	-0.2	98.8	-0.09	0.932

Finally, in order to explore heterogeneity among the adolescents for further research, Table 10 shows that girls have significantly worse outcomes in terms of self-esteem and well-being. Girls, in comparison to boys, have 2.99% lower self-esteem, 4.22% lower satisfaction with life, 3.15% lower satisfaction with family, and, measured by the happiness index, 0.326 standard deviation less than boys[8]

[8] The absolute magnitudes of the indices are in units akin to standardized happiness scores: the estimates shows where the mean of the treatment group is in the distribution of the control group in terms of standard deviation units.

Table 10
OLS Regression - The Impact of Gender on Self-Esteem, Satisfaction with Life, Satisfaction with Family, and Happiness Index

	Self-Esteem	Satisfaction with Life	Satisfaction with Family	Happiness Index
Women	-0.0299***	-0.0422***	-0.0315***	-0.326***
	(0.00990)	(0.0153)	(0.0100)	(0.0274)
Age	Yes	Yes	Yes	Yes
Age*Age	Yes	Yes	Yes	Yes
Race	Yes	Yes	Yes	Yes
Observations	2,205	2,205	2,205	2,205

Note: Robust Standard Errors; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Sensitivity Analysis and Potential Concerns

The initial goal of this study was to investigate if living with both parents is significantly related to self-esteem and life satisfaction. Some limitations in the current study should be addressed.

Firstly, the study has a cross section structure, so it is difficult to draw causal relationship. Future researchers are advised to implement longitudinal and experimental studies. To solve this problem, first the analysis is conducted using Instrumental variables (IV) estimation, an econometric technique designed to address selection bias. However IV approaches are dependent –as previously mentioned- on the assumption that the chosen instrument is valid, a validity which is difficult to establish conclusively as the relation between the instrument and the outcomes could be questionable. Thus, to introduce more robustness into the analysis propensity score matching is also employed.

Propensity score matching, like the IV approach, seeks to identify causal linkages, based on others assumptions.

Secondly, the data in this study was collected only through self report scales, and this could be a potential threat to internal validity. The use of multiple methods for evaluation (e.g., parent, peer reports) may minimize the influence of subjectivity. To measure life satisfaction, three outcomes are used with the objective of reducing possible subjectivities, capturing adolescent's answers at different questions.

Thirdly, the questions included in the survey refer to the presence of parents at home and not to the fact of having or not divorced parents, so the case of adolescents who live outside their parent's house but whose parents live together was registered as living without both parents. For the analysis, only adolescents from 12 to 18 years old were considered, because it can be assumed that most adolescents younger than 18 years old live at their parents' home. It is unlikely that these youngsters achieve economic independence to emancipate from their parents, and/or move to Montevideo (capital city, where the main universities are established) to continue their tertiary studies. Additionally, with the objective of strengthening results, the same analysis (OLS, IV estimation and Propensity Scores) is carried out questioning 12 to 17 and 12 to 16 year-old adolescents. All results were significant and had positive sign[9].

[9] Results mentioned but not shown are available from the authors upon request.

Fourthly, the outcomes variables: *Self-Esteem, Satisfaction with Life and Satisfaction with Family* are not continuous, so it can be argued that linear regressions models are inappropriate, and non linear models as Probit, Logit or Tobit are better options. But this study, based on Angrist and Pischke (2008), used OLS as they suggest, because it has the virtue of simplicity, automation, and comparability across studies; there is no difference on significance analyses and coefficients are no relevant for this paper.

Fifthly, in order to have a better interpretation of the outcomes, variables: *Self-Esteem, Satisfaction with Life and Satisfaction with Family* were used as dichotomous variables. On the other hand with the objective to strengthen the analysis, the three outcomes were also analyzed as ordinal variables using order Logit and order Probit. Treatment variable resulted significant with the three outcomes at age ranges: 12 to 18 year-old, 12 to 17 year-old and 12 to 16 year-old[10].

Finally, the study group was composed by adolescents in Uruguayan culture which limits the generalization of the findings of the current study. Despite its limitation, the current study considerably extended the insight about the underlying mechanisms between family structure and self-esteem in adolescents.

[10] Results mentioned but not shown are available from the authors upon request.

Discussion

Kong and You (2011) and Simsek (2011) demonstrated the mediation role of self-esteem in determining life satisfaction. The contribution of the current study is to identify the family structure as a measure of adolescent´s social support in the path towards life satisfaction. Thus, living with both parents may predict higher levels of self-esteem which results in higher life satisfaction.

Kong and You (2011) show that the path of social support → self-esteem→ life satisfaction is significant. This path indicates that individuals with high social support are apt to engaging in high self-esteem, and in turn, lead to high life satisfaction. The results obtained suggest that living with both parents impacts positively on adolescent´s self-esteem and their life satisfaction, therefore it could be concluded that living with both parents, as part of adolescent´s social support, influences life satisfaction by a pathway, with the impact of living with both parents mediated by self-esteem. In other words, adolescents who live with both parents are likely to have higher self-esteem, which results in higher life satisfaction than adolescent´s who don´t live with both parents.

The first years of life seem to be important in order to form the individual's character; parents are the main influence at that age, playing a crucial role in children´s character (Nansook, 2004; Holder, Coleman and Singh, 2011). Adolescent´s with a strong character may face problems more easily, raising their life satisfaction levels. Because self-esteem is part of the personality system and adolescent´s character, self-esteem could be influencing

adolescent´s life satisfaction. Self-esteem is a shield to deal with potential problems like changes in family structure.

Robson (2009) exposed that one mechanism behind the association between living in an intact family and life satisfaction, is that when adolescents lose the more educated parent with higher social position, adolescents´ well being is affected. This is associated with adolescents´ aspirations and aspirations are associated with self-esteem. Economic hardship may also affect educational attainment, which may impact negatively upon aspirations (Robson, 2009). These mechanisms could be determining low self-esteem and consequently low life satisfaction.

The Path: living with both parents→ self-esteem→ life satisfaction could be also explained as follows: family reorganization causes stress in adolescent (The Institute for American Values, 2005; Çıvıtcı, Çıvıtcı and Fıyakali, 2009; Robson, 2009) affecting their self-esteem, retracting themselves, sometimes feeling that the rules change and feeling guilty about that, in consequence these feelings cause low life satisfaction (Çıvıtcı, Çıvıtcı and Fıyakali, 2009; Robson, 2009).

The above results contribute to explain the family structure as part of adolescent social support. Living with both parents impacts positively on adolescent´s self-esteem and their life satisfaction. Thus, based on Kong and You (2011) and Simsek (2011), self-esteem could be playing a mediation role between living with both parents and life satisfaction.

This study also found that being a girl is significantly associated with lower self-esteem and life satisfaction: this could guide future research on the heterogeneity effects of family stability on adolescents. These gender differentials may be associated with contemporaneous psychological literature that finds gender differences in cognitive attitudes, resilience, and demands different attention by gender from parents, educators, etc. (Sax, 2006).

Finally, as the results of the current research suggest a linkage between family stability (measured by the presence of both parents at home), adolescents´ self-esteem and their happiness, these findings may have implications for social policy and future researches. Since family stability seems important for adolescents´ life satisfaction, it is interesting to answer questions such as: What are the couple dynamics that lead to stability or breakup, and after breakup, to ongoing parent's involvement or disengagement? What prevents non-custodial parents to engage with their children or push them to disengage? Previous literature (Edin & Kefales, 2005; England & Edin, 2007) has suggested some hypotheses to be tested in further research. Also, in order to guide policy, some possible questions are: What is the nature of parental relationship at birth? How stable are relationships? What are the capabilities needed by parents? What programs could be designed by policy makers to improve these capabilities in parents? What are the factors implicated in breaking up stories (constant arguments, verbal or physical abuse, lack of love and attention), and what could policy do to help parents avoid them and improve their quality of relationship? What role could policies play in the lives of fragile[11] families? Some

[11] Fragile in terms of economic and social resources or in terms of biological and social ties

organizations are developing new initiatives[12] to provide a stable environment to raise adolescents. Policy decisions should consider the avoided personal costs in terms of adolescents' self-esteem and happiness, and the externalities associated with family instability**.** Helping couples gain access to the skills and knowledge necessary to form and sustain healthy families seems to be a necessary issue.

[12] Community Healthy Marriage Initiative; Supporting Healthy Marriage, MDRC; Building Strong Families, Mathematica Policy Research; Administration for Children and Families.

References

Angrist, J. D., & Krueger, A. B., (2001). Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments. *The Journal of Economic Perspectives, Vol. 15, No. 4. (Autumn, 2001), pp. 69-85.*

Angrist, J. D., & Pischke, J. S., (2008). Mostly Harmless Econometrics: An Empiricist´s Companion. *Princeton University Press.*

Antecol, H., & Bedard, K., (2007). Does Single Parenthood Increase the Probability of Teenage Promiscuity, Substance Use, and Crime? *Journal of Population Economics, 20, 1, pp. 55-71.*

Bucheli, M., & Vigna, A., (2005). Un Estudio de los Determinantes del Divorcio en Uruguay. *Desarrollo y Sociedad.*

Carter, C., (2003). Love in Different Packages: The Effect of Family Social Capital on Childhood Thriving. *Conference Papers - American Sociological Association, pp. 1-19*.

Çıvıtcı, N., Çıvıtcı, A., & Fıyakali, N., (2009). Loneliness and Life Satisfaction in Adolescents with Divorced and Non-Divorced Parents. *Educational Sciences: Theory & Practice, 9, 2, pp. 513-525.*

Díaz, R., (2003). Historia Económica del Uruguay. *Montevideo, Taurus Eds*.

Edin, K., & Kefales, M.J., (2005). Promises I Can Keep: Why Poor Women Put Motherhood before Marriage. *Berkeley, CA: University of California Press.*

England, P., & Edin, K., (editors), (2007). Unmarried Couples with Children: The Unfolding Lives of New Unmarried Urban Parents. *New York, NY: Russell Sage Foundation.*

Estela Retana-Franco, B., & Sánchez-Aragón, R., (2010). Rastreando en el Pasado... Formas de Regular la Felicidad, la Tristeza, el Amor, el Enojo y el Miedo. *Universitas Psychologica, 9, 1, pp. 179-197.*

Evans, M., & Kelley, J., (2004). Effect of Family Structure on Life Satisfaction: Australian Evidence. *Social Indicators Research, 69, 3, p. 303.*

Gerard, J., & Buehler, C., (2004). Cumulative Environmental Risk and Youth Maladjustment: The Role of Youth Attributes. *Child Development, 75, 6, pp. 1832-1849.*

Guigou, N., (2006). Religión y Política en el Uruguay. *Civitas – Revista de Ciências Sociais, 6*(2), 43-54.

Heard, H., Gorman, B., & Kapinus, C., (2008). Family Structure and Self-Rated Health in Adolescence and Young Adulthood. *Population Research & Policy Review, 27, 6, pp. 773-797.*

Holder, M., Coleman, B., & Singh, K., (2011). Temperament and Happiness in Children in India. *Journal of Happiness Studies.*

Institute for American Values, (2005). Why Marriage Matters, 2ed. *Institute for American Values.*

Instituto Nacional de Estadística, (2011). Estadísticas Vitales. *Instituto Nacional de Estadística*. Retrieved from http://www.ine.gub.uy.

Jeynes, W.H., (2001). The Effects of Recent Parental Divorce on their Children's Consumption of Alcohol. *Journal of Youth & Adolescence, 30, 3, p. 305.*

Jiménez, T. I., Murgui, S., Estevez, E., & Musitu, G., (2007). Comunicación Familiar y Comportamientos Delictivos en Adolescentes Españoles: El Doble Rol Mediador de la Autoestima. *Revista Latinoamericana de Psicología*, volumen 39, No 3, 473-485.

Kahneman, D., & Krueger, A. B., (2006). Developments in the Measurement of Subjective Well-Being. *The Journal of Economic Perspectives, Vol. 20, No. 1 (Winter, 2006), pp. 3-24.*

Kling, J., Liebman, J., & Katz, L., (2007). Experimental Analysis of Neighborhood Effects, *Econometrica* 75(1), 83-119.

Kong, F., & You, X., (2011). Loneliness and Self Esteem as Mediators between Social Support and Life Satisfaction in Late Adolescence. *Social Indicators Research.*

Lundberg, S., & Pollak, R. A., (2007). The American Family and Family Economics. *Journal of Economic Perspectives, 21*(2), 3-26.

McLanahan, S. S., (1985). Family-Structure and the Reproduction of Poverty. *American Journal of Sociology, 90*, 873-901.

Merkaš, M., & Brajša-Žganec, A., (2011). Children with Different Levels of Hope: Are There Differences in their Self Esteem, Life Satisfaction, Social Support, and Family Cohesion?*, Child Indicators Research, 2011, Volume 4, Number 3, Pages 499-514.*

Musick, K., Bumpass, L., & Meier, A., (2006). Influences of Family Structure, Conflict, and Change on Transitions to Adulthood. *Conference Papers - American Sociological Association, p. 1.*

Nansook, P., (2004). Character Strengths and Positive Youth Development. *Annals of the American Academy of Political and Social Science, 591.*

Observatorio de la Familia, (2010). Centro de Investigaciones Aplicadas. *Universidad de Montevideo, Uruguay. Retrieved from http://www.um.edu.uy.*

Paredes, M., (2003). Trayectorias Reproductivas, Relaciones de Género y Dinámicas Familiares en Uruguay. *Doctoral Thesis, Universidad Autónoma de Barcelona.*

Proctor, C., Linley, A., & Maltby, J., (2009). Youth Life Satisfaction Measures: A Review. *The Journal of Positive Psychology, Vol. 4, No. 2, March 2009, 128–144.*

Robson, K., (2009). Changes in Family Structure and the Well-being of British Children. *Conference Papers - American Sociological Association, p. 1*.

Sax, L., (2006). What teachers need to know about the emerging science of sex differences. *Educational Horizons, 84*, 190-212.

Simseck, F., (2011). Structural Relations of Personal and Collective Self-Esteem to Subjective Well-Being: Attachment as Moderator, *Social Indicators Research.*

VanderValk, I., Spruijt, E., de Goede, M., Maas, C., & Meeus, W., (2005). Family Structure and Problem Behavior of Adolescents and Young Adults: A Growth-Curve Study. *Journal of Youth and Adolescence, 34, 6, pp. 533-546.*

Williams, C., (2001). Family disruptions and childhood happiness. *Canadian Social Trends, 62, p. 2.*

Zeiders, K. H., Roosa, M. W., & Tein, J.Y. (2010). Family Structure and Family Processes in Mexican-American Families. *Journal of Family Issues, v31 n3 p301-332.*

Zullig, K., Valois, R., Huebner, E., & Drane, J., (2005). Associations Among Family Structure, Demographics, and Adolescent Perceived Life Satisfaction. *Journal of Child & Family Studies, 14, 2, pp. 195-206.*