Family contexts and adolescents' emotional status

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Keywords: family characteristics, adolescents, psychological health, Italy, family structure

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1. Introduction

Children's living arrangements have become increasingly diverse and complex in recent decades (Kreider, 2007; OECD, 2007). Besides the traditional families (mainly two biological married parents), alternative forms of family (for example, step-families and separated single-parent families) have been steadily increasing, even in countries, such as Italy, which lately started moving from traditional to less traditional family behaviours.

Research shows consistently that growing up in some non-traditional families may be associated with risky behaviors, which may in turn have negative consequences for subsequent life course. For example, children of divorced parents are shown to have poorer academic performance (Sun and Li, 2001; Steele et al., 2009), lower economic security (Biblarz and Gottainer, 2000), and earlier sexual activity and pregnancies (Kiernan and Hobcraft, 1997; Wu and Thomson, 2001) than children of intact families. Studies on the emotional status of children living in non-traditional families are few and far between, and even the few are focused on the children of mainly early and middle childhood (Kiernan and Mensah, 2010).

The present article aims to examine whether adolescents living in separated lone-parent and step-parent families have lower levels of psychological well-being than those living in traditional families. Moreover, we are interested in verify whether the possible impact of family structure on adolescent's emotional status is mediated via some family resources like parental health and family economic circumstances. Some non-traditional families have indeed been shown to face more risks of lower economic, relational and parental resources (at least as regards single parents, see, for example, Hope et al., 1999), and these, in turn, may matter for the psychological well-being of children. The current study refers to Italy, a country that has been contending with the problem of marital instability only since the last few decades. Thus, adolescents living in families coming from a union dissolution are the forerunners in the country and, for this reason (similarly to suggestions

of other authors – Amato and Keith, 1991; Wolfinger, 1999) they might be more likely affected by emotional problems than adolescents living in more traditional families. The present article uses data from the survey *Health status of the population and use of health services*, which was carried out in 2004-2005 by the National Statistical Institute. This survey is based on a national representative sample of households and is the most updated source of detailed data about the physical and psychological health of Italian adolescents. However, given the cross-sectional nature of the data, the results of our analyses will have to be interpreted taking into account that they are the effects of numerous processes which act in a longitudinal way.

2. Why does family structure matter for adolescents' well-being?

Different mechanisms may explain why children living in separated single-parent or in step-parent families may have lower emotional status than those living in more traditional families[1].

First, the poor psychological health of adolescents living in non-traditional families may be due to the stressful events that are at the origin of the new family structure, and by the family circumstances to which the children are exposed after the dissolution of the parental union.

Separation and repartnering introduce a discontinuity in the course of children's family life, which entails important changes in their daily life and may be a source of more or less temporary psychological distress[2]. More importantly, parents' separation and repartnering force children to reorganise their personal relationships with their parents and other reference adults and this may be responsible for a more or less temporary lower emotional status in the children. For example, in the case of separated single-parent families, the parental separation has been found to be, in itself, a source of psychological distress of children[3] (Strohschein, 2005). From this perspective, children living in step-families can be more likely to be exposed to these forms of stress because they would have experienced more than one important family change in their life.

In addition, the family structure in itself may expose children to additional contextual risks that may negatively influence their emotional status. Children living in separated single-parent families may have poor emotional status because of weaker connections between the child and his or her non-custodial parents (usually the father), or because of possible conflicts between the parents following the separation. In two-parent step-families, children may experience further disadvantages. They live with the biological parent's partner, who may not be a fully integrated family member and may compete for their biological parent's time and attention; therefore they may undergo additional distress in their bid to adjust to the new circumstances (Visher et al., 2003; Baxter et al., 2004; Kirby, 2006).

Second, family structure may affect outcomes for children, *via* family resources. On the one hand, it is well established that a shortage of family resources negatively influences the children's emotional status. Children who experience poverty are more likely than their more advantaged peers to have a negative outcome, both in terms of risky behavior and psychological well-being (see, for example, Strelitz and Lister, 2008). Even parental health influences children's psychological well-being (Smith, 2004). Poor (mental) health is often associated with less engaged parenting and a reduced ability to emotionally attend and respond to children's needs; these, in turn, can affect the psychological and emotional well-being of children. In addition, it should be underlined that the economic resources and mental health of parents are not independent of each other: economically disadvantaged individuals are more likely than advantaged ones to experience psychological problems (for example, see Readings and Reynolds, 2001); but, in turn, socio-economic deprivation

[1] Hereafter we refer to traditional families as those represented by biological parents who are a married couple or by a widowed one-parent family. Non-traditional families are instead one-parent families due to separation or divorce (henceforth, called separated single- or one-parent families) and step-families.

[2] Similar effects may occur even in the case of a parents' death.

[3] In fact, in some cases, a stressful life event such as parental divorce may actually have beneficial effects on children when divorce provides an escape from a hostile and high-conflict family environment (as suggested by the stress relief hypothesis formally stated by Wheaton, 1990).

and financial difficulties frequently coincide with mental health difficulties (Hudson, 2005; Jenkins et al., 2008). On the other hand, the literature documents that both the material resources and the parents' health vary considerably across living arrangements. Single-mother families, for example, are typically more financially impoverished than two-parent families (Millar and Ridge, 2001); this holds true in Italy too (Mazzuco et al., 2009). Moreover, single mothers, regardless of their economic status, report more stress and depressive symptoms than partnered mothers (Targosz et al., 2003; Cooper et al., 2008). Thus, most of the differences in a child's emotional status between single-parent and two-biological-parent families may even be the result of different levels of poverty and parents' health (McLanahan and Sandefur, 1994). These effects would probably be less severe for step-families. Literature about the family resources of step-families is less rich than that about single mothers. There is empirical evidence that repartnering improves the economic status of lone mothers (Morrison and Ritualo, 2000; Kreider, 2003; Dewilde and Uunk, 2008) and there are no arguments to suggest that repartnering doesn't improve the psychological status of lone mothers. Thus, we might assume that the effect of family resources is more significant for single-parent families than for step-families.

International literature demonstrates that the negative effects of some non-traditional families on emotional and psychological well-being may be mediated by family resources. In fact, their role is more or less relative to each country and the strategies of analysis. Joshi et al. (1999) found for example that, once a family socio-economic status is taken into account, the negative effects of living in a single-mother or a step-parent family on children's behavioural outcomes disappear in Britain and are strongly reduced in the United States. With the same American data-set used by Joshi et al., but focusing on the differences between single-mother and two-parent families (including biological parents or step-parents), Carlson and Corcoran (2001) showed that the effect of living with a single parent on children's behavioural problems dropped completely when both family income and maternal psychological functioning were taken into account. Other authors found that while controlling for socio-economic status and maternal mental health removed the negative effects of single-parent families on children's emotional well-being, the same was not the case for children living in step-families; instead, they remained more likely to have psychological difficulties than children living with both biological parents (McMunn et al., 2001). Even recently, mixed results are obtained. Kiernan and Mensah (2009) found that once poverty and maternal depression were taken into account, the psychological status of children living in single-parent homes as well as in step-families, was not significantly lower than that of children in traditional (two-parent) families. However, the same authors found that the negative effects of living in single-mother or step-parent families did not decrease, once psychological status and family trajectories were considered in more detail and mediating factors were controlled (Kiernan and Mensah, 2010).

Finally, a possible negative effect of non-traditional families on adolescents' well-being may be due to a selection effect; that is, to factors that both predispose parents to separation and are associated with adolescents' risk of psychological distress (Amato, 2010). For example, Wade and Pevalin (2004) found that individuals who separated or divorced had poorer mental health prior to marital disruption. In the same way, some children may have psychological problems even before their parents separate, due, for example, to poor resources or their exposure to parental conflicts, which may also be factors in the separation itself (Sun, 2001; Sun and Li, 2002; Strohschein, 2005).

3. Data and measures

3.1. Data-set and sample

The data came from the survey *Health Status of the Population and Use of Health Services*, carried out in Italy in 2004-2005 by the National Statistical Institute (ISTAT). In this survey, persons belonging to a nationally representative sample of about 50,000 households (corresponding to about 128,000 individuals) were asked to provide data on health status, disability, life styles, prevention, and use of health services and medicines. Other socio-economic and demographic information was

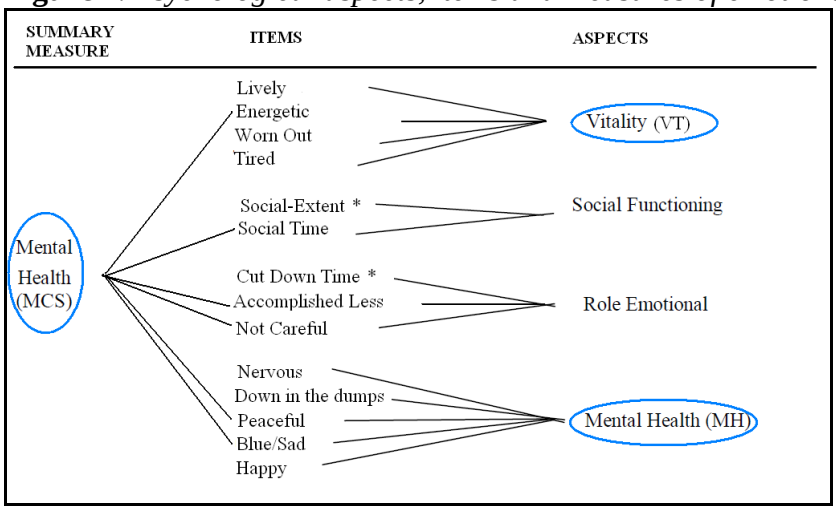
also available. In particular, the survey included the data on the age, gender, marital status, education, occupational status, and family ties with other household occupants for each member of the household. In addition, for each household, the survey collected information on the household and family structures, the geographical region of residence, and the economic conditions.
A key feature of this survey was that it collected numerous data on the physical and psychological status for all individuals over the age of 13. In particular, the questionnaire presented a selection of items coming from the SF-36, a widely used health survey measuring self-reported health status (Ware and Sherbourne, 1992); these items examined in detail the physical and psychological health of the respondents during the four weeks prior to the interview. Psychological health was examined with respect to several features: vitality (described through all the four items used in the SF-36), social functioning (one of the two items of the SF-36), role emotional (two of the three items), and mental health (all the five items). Some of these items allowed us to obtain specific indexes to measure two of the four components of SF-36 describing psychological health: vitality and mental health. Moreover, ISTAT used some of the data on physical and mental health status to obtain two synthetic indicators of physical and mental health based on the SF-12 (a compressed version of SF-36). These two synthetic measures, the physical component summary (PCS) and the mental component summary scale score (MCS), were then available in the data-set (for details on the construction of these synthetic indexes, see Ware et al., 1998).
For the current analyses the attention was focused on the individual and family data referring to the 5,226 individuals aged 14-17 living with at least one parent[4].

3.2. Measuring the emotional status of adolescents

This study did not limit its attention to a single indicator of adolescents' psychological status. Adolescent emotional status was measured using three indicators: a) two indexes that examined specific features of psychological health: vitality (VT) and mental health (MH), and b) the synthetic index of psychological health built by ISTAT (MCS).
The two specific indexes of psychological health were built using items from SF-36. The VT index was based on four items describing how often (1 = always, 2 = almost always, 3 = for a long time, 4 = sometimes, 5 = almost never, 6 = never) an individual felt lively, energetic, worn out, or tired in the four weeks prior to the interview. Similarly, MH was built with five items on how often an individual felt nervous, down in the dumps, peaceful, sad, or happy. Both indexes were obtained by summing up the scores describing how often adolescents felt the different positive or negative moods (positive moods' frequency scores were coded with higher values indicating higher frequencies) and standardizing them by their range. In this way both indexes vary from 0 to 100, higher scores indicating the better psychological conditions. The MCS index is based on SF-12 and ranges from 0 to 100, higher scores indicating better psychological well-being. The way the three measures were built and the items used are described in Figure 1.
Adolescents in our sample have vitality scores (VT) ranging from 5 to 100 (mean value of 78.49) and mental health scores (MH) varying from 0 to 100 (mean value of 82.51). Different from VT and MH scores, the MCS scores vary only from 10.26 to 69.33 (mean of 53.52). The percentage distributions of the three indexes (grouped in five-point classes) are presented in the graphs of Figure 2.
For the goals of this study, VT and MH were dichotomised using the 20th percentile as a cut-off. A similar threshold was used to dichotomise MCS. In fact, other studies suggested different cut-offs; for example, Abramson and colleagues (2008) used the 10th percentile. However, focusing on adolescents, a higher threshold might better represent a psychological distress for this population.

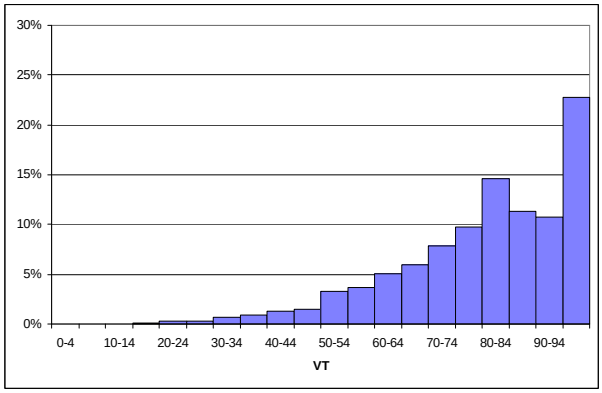
[4] A total of 23 cases (corresponding to 0.4% of the adolescents) were removed because adolescents were living in non-parental families. Similarly, 3 teenage parents were discarded. Another 55 observations (corresponding to 1.0% of the adolescents) living in never-married single-parents families were also removed, because the small size did not guarantee obtaining clearly reliable results in the analyses.

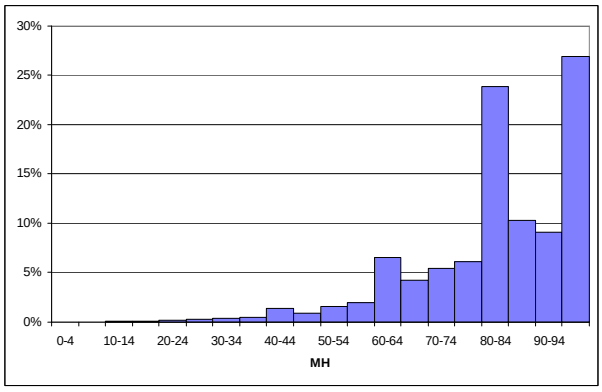
Figure 1. *Psychological aspects, items and measures of emotional status.*

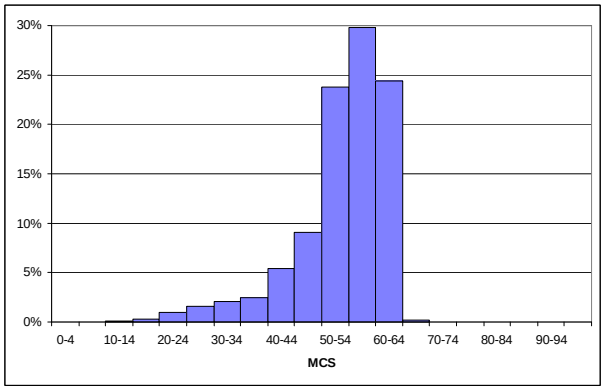


* = not available in the questionnaire

Figure 2. *MCS, VT, and MH among the adolescents of the sample (%).*







3.3. Measuring the family context

The key variable to describe family context was family structure. It was defined on the basis of the broad categorizations of families proposed by ISTAT, the family ties between young children and the adults in their households, and the marital status of parents. Teens living in families with a couple were distinguished between those who were living with both their biological parents[5] (4,544 observations, corresponding to 86.9% of the whole sample) and those who were living with their father and his partner or with their mother and her partner (110 cases). Our data did not provide information to distinguish who was the step-parent between the two members of the couple. Adolescents living with previously married single parents were distinguished according to whether the unique parent in the household was widowed (135 cases, of which 30 were fathers) or separated or divorced (437 cases, of which 66 fathers). In contrast with most previous studies on this topic that have typically classified lone-parent families to include any non-intact family structure, this study distinguished between new one-parent families and more traditional lone-parent families. Unfortunately the small sample size did not allow to distinguish these families further according to the gender of the lone parent.

Other variables of interest were those describing family resources. Family resources were obtained using information referring to the family (income) or to the parents (education and health). Information on parents was limited to co-resident parents. Therefore, for one-parent families, the unique parent's characteristics were considered. For families with both biological parents, characteristics of both the biological mother and father were used. In the case of step-families, the characteristics of the biological parent and those of the biological parent's partner were considered. Parental health was measured using MCS and PCS indexes; thus, both physical and psychological health components were considered. In cases of lone parents, these measures were referred to the unique parent; in cases of both biological parents or of one step-parent, the same measures were described by the mean health of the couple of parents whatever they were, biological or step. Parents' educational levels were instead defined considering the highest (or the unique) educational level of the parents (university, high school, or junior school or less). The economic status of a household was determined through a subjective evaluation of the family's economic resources over the previous 12 months[6]: a dichotomous variable was built that distinguished whether the family had poor or insufficient resources.

4. Some descriptive findings

The dichotomous measures of emotional status reported in Table 1 show that teenagers' psychological well-being differs according to the family structure. Adolescents with the highest vitality are those living with widowed lone parents, followed by those living with both biological parents and those living with separated lone parents. The results are different when considering the mental health: teens living with both biological parents experience the highest mental health. This result is confirmed by the synthetic measure of psychological health, the MCS index. Adolescents living in step-families show, conversely, the highest levels of psychological distress, both in the VT and MH indexes and in the synthetic measure MCS. These results are confirmed by the mean values of the three indexes (as shown in Table A of Appendix).

Table 1 shows also that adolescent psychological well-being is associated with family resources. Teens with psychological distress seem to be in higher percentages among families with poor economic resources; however, the differences are not very strong and they regard only MH and MCS indexes. In the opposite direction, unexpectedly, parents with higher education correlate to

[5] Despite the fact that unmarried couples cannot be considered typically traditional family forms, we do not distinguish them from married couples due to their limited sample size. Married biological parents are, indeed, 98.7%, whereas only 1.3% (59 observations) were unmarried: this number clearly would lead to non interpretable results.

[6] In the survey a question asked whether, taking into account the needs of each member of the family, economic resources in the 12 months prior to the interview were: very good, good, poor or insufficient.

children with lower emotional well-being and this is true for both vitality and mental health and for the MCS. The stronger effect of family context is shown by the parental physical and particularly, psychological health: adolescents with emotional well-being under the 20th percentile (in terms of VT, MH and MCS) are in higher percentages in families with parents with low levels of health. For example, adolescents with lower MCS scores represent only one out of ten if parents present a relatively high MCS but they increase threefold if parents have a low MCS.

Table 1. *Percentage of adolescents with psychological health under the 20th percentile by family structure and other family characteristics.*

	% with VT under the 20th percentile	% with MH under the 20th percentile	% with MCS under the 20th percentile
Family structure			
Both biological parents	16.9	17.6	19.6
One biological/one step-parent	22.7	27.3	28.2
Widowed one-parent	14.8	20.0	22.9
Separated one-parent	17.2	20.6	21.7
Family's economic status			
Sufficient	17.0	17.2	19.5
Poor or insufficient	17.1	20.0	21.2
Family's highest educational level			
High	19.9	19.9	22.3
Middle	17.1	17.4	19.5
Low	16.2	18.2	19.9
Parental physical health (PCS)			
Under the 33rd percentile (under 51.9)	22.8	23.9	26.2
33-66th percentile (51.9-55.7)	15.1	14.7	17.4
Over the 66th percentile (over 55.7)	13.2	15.9	16.7
Parental mental health (MCS)			
Under the 33rd percentile (under 48.3)	24.9	29.2	30.8
33-66th percentile (48.3-54.2)	16.8	17.0	18.6
Over the 66th percentile (over 54.2)	9.3	8.3	10.8

In fact, as previously suggested and as Table 2 shows, some family resources might be associated with family structure. One-parent families, especially separated ones, and step-families present, for example, lower economic status than families with both biological parents. Widowed lone parents are also more likely to have lower educational levels than partnered parents (however, this could be associated to a relatively higher age of widowed parents). Lastly, lone parents, and to a minor extent parents in step-families, are more likely to have lower levels of psychological health than parents in families with both biological parents. Conversely, parents with higher levels of physical health are those living in step-families. Again, this might be explained by the age of these parents who are, on average, younger than those living in other family forms. Data not reported here for reasons of space show, indeed, that these parents are, on average, 42.4 years old, whereas the others are older (both biological parents 45.6; widowed lone parents 47.3; separated lone parents 43.6). Lastly, Table 2 shows that mothers have, generally, lower (physical and psychological) health than fathers and that the association between parental health and family forms holds across the gender of the parent.

Since literature has shown that family resources influence adolescent emotional status and since, as Table 2 suggests, family resources vary with family structure, the associations between family

structure and adolescent well-being observed in Table 1 should be considered with caution. In particular, the effects of family structure must be examined taking into account family resources.

Table 2: *Family resources according to family structure.*

	Both biological parents	***One biological/one step-parent***	***Widowed one-parent***	***Separated one-parent***	***Total***
Family's economic status					
Very good or good	69.0	61.8	57.0	49.7	66.9
Poor or insufficient	31.0	38.2	43.0	50.3	33.1
Family's highest educational level					
High	14.2	15.5	9.6	13.3	14.0
Middle	33.9	31.8	23.0	34.3	33.6
Low	51.9	52.7	67.4	52.4	52.4
Mean Parental PCS					
Maternal PCS*	52.1	53.5	51.1	51.9	52.1
Paternal PCS*	52.4	54.2	53.5	53.5	52.4
Parental PCS	52.2	53.8	51.7	52.2	52.3
Mean Parental MCS					
Maternal MCS*	49.4	48.2	47.6	46.8	49.2
Paternal MCS*	51.2	51.0	47.4	50.8	51.2
Parental MCS	50.3	49.6	47.5	47.4	50.0
Total (n)	4,544	110	135	437	5,226
Mothers	4,544	110	105	371	5,130
Fathers	4,544	110	30	66	4,750

* = when present

5. Results of multivariate logistic analyses

Tables 3, 4, and 5 report results for multivariate analyses describing the probability of adolescents having vitality, mental health, and MCS, respectively, under the 20th percentile. The analyses were carried out in a series of steps. Model 1 includes only the family structure and a range of background factors, which controlled for adolescent (age, gender, physical health[7]) and adolescent's family (presence of siblings, parents' age[8], region of residence) characteristics; in addition, the model considers whether the adolescent directly answered the individual questionnaire. Model 2 adds the covariates representing family socio-economic status (income and parents' levels of education); finally, Model 3 includes (physical and mental) parental health[9].

[7] Physical health of adolescents was measured considering whether physical limitations had consequences on people's lives, and if so, in what ways. Five questions were used to determine a) how much their health limited them in moderate physical activities; b) how much their health limited them in climbing flights of stairs; c) whether they had accomplished less than they would have liked in their regular daily activities as a result of their physical health (during the 4 weeks before the interview); d) whether they were limited in the kinds of work or other activities (during the 4 weeks before the interview); and e) how much pain interfered with their normal work (during the 4 weeks before the interview). The answers to these questions were summarized and adequately weighted and grouped leading to a variable with three categories indicating the presence of no, weak, or stronger physical limitations (see Table B in the Appendix). Physical health of adolescents, different from that of parents, was not measured by the PCS index, since this index showed a concentrated distribution among adolescents.

[8] Parental age is measured in a similar way to that described in section 3.3 for parental health.

[9] Table B in the Appendix shows the percentage distribution of each covariate for the sample of 5,226 adolescents aged 14-17.

Table 3 lists the results for vitality. They show that family resources have an impact on adolescents' well-being, but some of the effects are not in the expected direction: as supposed, good parents' (physical and mental) health significantly decreases their children's risk of having low vitality (an increase of one point in parents' MCS and PCS leads to about a 6%[10] and 3% reduction, respectively, in the odds of having VT scores under the 20th percentile), whereas, an unexpected opposite effect is observed for parents' education, higher education being associated with higher risk of distress. In addition, no effects are found for the variable strictly measuring family economic status. As regards the family structure, interestingly and unexpectedly, once family resources, in particular parental health, are taken into account, adolescents living in widowed single-parent families show higher levels of vitality (their odds of having VT under the 20th percentile are 40% lower) than those living with two biological parents, even if the effect is only weakly significant.

Table 3. *Factors influencing the probability of having vitality under the 20th percentile.*

	Model 1	**Model 2**	**Model 3**
Intercept	-2.01***	-1.96***	2.66***
Family structure *(ref: both biological parents)*			
One biological/one step-parent	0.22	0.20	0.21
Widowed single-parent	-0.33	-0.32	-0.51*
Separated single-parent	0.01	-0.02	-0.24
Adolescent's gender *(ref: female)*			
Male	-0.51***	-0.51***	-0.55***
Adolescent's age *(ref: 17 years old)*			
14	-0.32***	-0.33***	-0.36***
15	-0.28***	-0.28***	-0.30***
16	-0.04	-0.05	-0.04
Who answers to questionnaire *(ref: the adolescent)*			
Other components of the household	-0.42***	-0.42***	-0.39***
Missing	0.04	0.04	0.09
Average parental age	0.01	0.01	-0.01
Presence of siblings in the household *(ref: one or more siblings)*			
The adolescent is the only child	-0.08	-0.07	-0.10
Residence's region *(ref: South)*			
North	0.57***	0.58***	0.64***
Centre	0.29***	0.28**	0.29***
Adolescent's physical health *(ref: without any limitations)*			
With weak limitations	1.06***	1.06***	0.87***
With moderate or stronger limitations	1.71***	1.71***	1.58***
Family's economic resources *(ref: sufficient)*			
Poor or insufficient		0.08	-0.12
Educational level of at least one parent *(ref: low)*			
High		0.26**	0.32***
Middle		0.05	0.08
Parental physical health (PCS)			-0.03***
Parental mental health (MCS)			-0.06***

* = p < 0.10, ** = p < 0.05, *** = p < 0.01

The results were somewhat different with respect to the other component of psychological health, mental health (Table 4). The effects of parental health and education are similar to those observed for vitality. The significantly positive effect of poor family economic status on the risk of low

[10] 6 = [exp (-0.06)-1]*100.

mental health disappears once parental health is controlled. The impact of family structure, however, is completely different from that obtained for vitality. There are no indications that adolescents in single-parent families, either in widowed and in separated lone-parent ones, face different mental health from those living with both biological parents. In addition, teens living in step-families present significantly – even if only at 10% - lower well-being than those living with both biological parents (odds that are 50% higher), and these differences do not attenuate once family resources were taken into account. This suggests that, at least for step-families, the association between family structure and adolescent emotional well-being is not explained by parental socio-economic circumstances or parental health.

Table 4. *Factors influencing the probability of having mental health under the 20th percentile.*

	Model 1	**Model 2**	**Model 3**
Intercept	-1.62***	-1.70***	3.35***
Family structure *(ref: both biological parents)*			
One biological/one step-parent	0.42*	0.39*	0.40*
Widowed single-parent	0.07	0.05	-0.16
Separated single-parent	0.20	0.15	-0.13
Adolescent's gender *(ref: female)*			
Male	-0.42***	-0.42***	-0.47***
Adolescent's age *(ref: 17 years old)*			
14	-0.35***	-0.35***	-0.39***
15	-0.28***	-0.28***	-0.32***
16	0.10	0.10	0.12
Who answers to questionnaire *(ref: the adolescent)*			
Other components of the household	-0.25***	-0.26***	-0.21**
Missing	0.20	0.21	0.29
Average parental age	0.01	0.01	-0.01
Presence of siblings in the household *(ref: one or more siblings)*			
The adolescent is the only child	-0.13	-0.12	-0.17
Residence's region *(ref: South)*			
North	0.45***	0.48***	0.56***
Centre	0.18*	0.19*	0.21*
Adolescent's physical health *(ref: without any limitations)*			
With weak limitations	1.07***	1.07***	0.87***
With moderate or stronger limitations	1.32***	1.31***	1.16***
Family's economic resources *(ref: sufficient)*			
Poor or insufficient		0.23***	0.01
Educational level of at least one parent *(ref: low)*			
High		0.17	0.24**
Middle		-0.04	-0.02
Parental physical health (PCS)			-0.02***
Parental mental health (MCS)			-0.08***

* = p < 0.10, ** = p < 0.05, *** = p < 0.01

Considering the synthetic measure of emotional well-being, the MCS, the effects of family structure disappear (Table 5). Family resources have, instead, an impact that is quite the same as that observed in Tables 3 and 4: parents' good (physical and mental) health significantly decreases their children's risk of having low MCS; higher education of parents is associated with higher risk of distress and no effects are found for the variable strictly measuring family economic status.

Table 5. *Factors influencing the probability of having MCS under the 20th percentile.*

	Model 1	**Model 2**	**Model 3**
Intercept	-1.34***	-1.36***	3.86***
Family structure *(ref: both biological parents)*			
One biological/one step-parent	0.33	0.31	0.32
Widowed single-parent	0.13	0.12	-0.05
Separated single-parent	0.13	0.09	-0.15
Adolescent's gender *(ref: female)*			
Male	-0.51***	-0.51***	-0.56***
Adolescent's age *(ref: 17 years old)*			
14	-0.29**	-0.30***	-0.33***
15	-0.32***	-0.33***	-0.36***
16	0.03	0.03	0.04
Who answers to questionnaire *(ref: the adolescent)*			
Other components of the household	-0.29***	-0.29***	-0.25***
Missing	0.31*	0.31*	0.38**
Average parental age	0.01	0.01	-0.01
Presence of siblings in the household *(ref: one or more siblings)*			
The adolescent is the only child	-0.15	-0.14	-0.19*
Residence's region *(ref: South)*			
North	0.46***	0.47***	0.55***
Centre	0.20**	0.20**	0.22**
Adolescent's physical health *(ref: without any limitations)*			
With weak limitations	0.98***	0.98***	0.77***
With moderate or stronger limitations	1.06***	1.05***	0.87***
Family's economic resources *(ref: sufficient)*			
Poor or insufficient		0.16**	-0.06
Educational level of at least one parent *(ref: low)*			
High		0.17	0.24**
Middle		-0.03	-0.01
Parental physical health (PCS)			-0.03***
Parental mental health (MCS)			-0.07***

* = p < 0.10, ** = p < 0.05, *** = p < 0.01

The analyses show that some background factors have highly significant effects on the psychological well-being of adolescents and these effects are similar both for vitality and mental health components and for the synthetic measure of psychological well-being, MCS. In particular, boys have significantly lower probability of having psychological distress than girls and teens aged 14-15 have lower risk of emotional problems than those aged 16-17. These results are in line with the literature (see, for example, Bettge et al., 2008). As expected, physical limitations, particularly if moderate or stronger, significantly increase the risk of having lower psychological health. Less expected is instead the fact that adolescents living in the more economically developed regions of the country (North and Centre) have higher levels of psychological distress than those living in the South. The presence of siblings and parental age do not significantly influence teens' emotional well-being.

6. Summary and conclusions

The present study examines whether adolescents whose parents separate or divorce have lower levels of psychological well-being than those living in more traditional family units, specifically families with both biological parents. Moreover, there is an interest in verifying whether the effects

of family structure on adolescent emotional status are mediated by family resources. The analysis was carried out for Italy, a country that has only recently been affected by the phenomenon of marital instability and the consequent changes in family structure. Adolescents living with separated single parents or in step-families may thus be more psychologically stressed than other adolescents simply because they are the first to experience these new circumstances in the country.

The study is based on cross-sectional data, thus we cannot explain our results in the light of possible longitudinal processes. However, the data set offers the opportunity to determine whether or not the newly emerging configurations of Italian families pose risks to the psychological health of adolescents. In addition, data used have some particular strengths. First, unlike studies focused on early and middle childhood, where children's outcomes were reported by adults (mainly the mother), our data on emotional status were directly reported by adolescents: this allowed a close study of their well-being. Second, we have detailed information on both the physical and psychological health of parents that is not usually available in large data sets. Third, we can refer to a rather accurate classification of the family structure, distinguishing, for example, between separated and widowed single parents.

The results of our analyses suggest that adolescents living in non-traditional families do not necessarily present a worse emotional status than those living with both biological parents.

In line with other literature (for example, McMunn et al. 2001, Kiernan and Mensah 2009), adolescents living with a separated single parent do not have higher distress than those living with both biological parents. Unlike in this literature, however, the weak differences in MH and MCS found in the descriptive analyses disappear when only the background factors are taken into account[11]; thus poor parental health and lower income of separated single parent families so not seem to be responsible for a poorer psychological health of adolescents living in this type of family.

As found in McMunn et al. (2001), only adolescents who live in step-families show a lower emotional well-being than those living with two biological parents. The negative association between step-families and each of the three measures of emotional well-being documented by the descriptive analyses remains in the multivariate analyses only for the mental health component. The effect is weakly significant from a statistical viewpoint, but the fact that it is not mediated by family resources (family income and parents' education and health), and that it refers to the index that better approximates the psychological health of the individual, suggest that these adolescents may be at risk of higher emotional suffering than others.

Unfortunately, given the cross-sectional nature of our analyses, these results do not allow for testing possible explanatory mechanisms. However, we shall offer some hypotheses on the mechanisms involved and, in the meantime, exclude others.

First, the fact that adolescents living in separated single-parent families do not present lower psychological health than those living with both biological parents implies that they are not selected for being at risk of poor mental health just prior to their parents' marriage dissolution. Second, neither the experience of parental separation nor the family structure itself have permanent negative consequences on the mental health of children. However, since we do not know the time elapsed between the parental separation and the date of interview, we must consider that this result depends on relatively long average time elapsed since parental separation, so the temporary negative effects are not gathered by the analyses.

The more complex family biography of adolescents living in step-families (and the lack of more detailed information on the family climate) makes it more difficult to propose mechanisms that explain why adolescents living with step-parents have slightly poorer emotional health than the others. One possible reason is that the families were selected for children who already had poor mental health before their parents separated and/or repartnered. If that were the case, however, they could not be considered as a random sample of separated lone-parent families (here analysed) that had moved to different type of family unit. Alternatively (and maybe more likely), the emotional

[11] In fact, most previous studies did not distinguish lone parents according to their marital status nor did they exclude never married lone mothers, which are particularly at risk of economic and social distress.

distress is a response to the experience of the parent's second union. Two explanations are possible: on the one hand, the poorer emotional health of adolescents living in step-families is the effect of the specific features of family context (e.g. low quality of family relationships between children and adults); on the other hand, it is the result of cumulative, stressful experiences derived from multiple transitions – and multiple adjustments to new circumstances – through subsequent family forms. Differently from the case of single-parent families, in this case we cannot say whether this effect is permanent or only temporary. If adolescents had experienced the last transition shortly before the time of the interview, then we may be observing a temporary negative effect that is still in process.

Unexpectedly, the study shows that once parental health is taken into account, adolescents living with widowed single parents show better vitality than those living with both biological parents (even with a statistically weak effect). The result is counterintuitive at first glance and may be limited to the Italian context, but it is possible that the different processes associated with the formation of this family type (the death of a parent) make the adolescents more responsible and more vital than the others. The different (probably more protective) behaviours of the family network with respect to the components of the single-parent family may be another possible explanation for this result. Unfortunately, the lack of longitudinal data, as well as the lack of information on the relationships between family members and other relatives, prevents a more definitive explanation. Whatever the explanation is, this result suggests the necessity to distinguish between the two types of single-parent family according to the event of origin, at least in a first step of the analysis.

The results of this study suggest other remarks that may be useful to future analyses in this field.

First, the effects of family forms are sensitive to the measures of psychological health. Thus, attention should be paid to specific psychological components when considering the possible effects of non-traditional families on the well-being of children and adolescents. The effects may be worse in some aspects but better in others. Future studies on the impact of the new types of families on the psychological status of children should seek to clarify the meanings of different measures and to distinguish among the different emotional aspects that may be influenced by the experience of parents' separation. Second, family resources have varied effects on the emotional status of adolescents. The analyses confirmed the importance of parental health on all the components of adolescent emotional health. The result was expected, but it has to be stressed so that all those services that can promote parents' health will receive particular attention from family policy. Results show that in the cases where economic status has significant effects, they are absorbed by parental health; in other words, the possible effect of economic resources seems to be completely mediated by parental (physical and psychological) health. It could be that the use of a subjective indicator may have had an effect on this result: for example, more depressed parents tend to give a worse picture of their family economic conditions. However, it could even be that poor health is the cause of poor economic circumstances.

Finally, the study found that parents' education is highly negatively associated with adolescent emotional status, whatever the measure of emotional status. This is somewhat surprising. In our hypothesis, the relationship should be contrary to what was observed: education should, indeed, be either a proxy for the economic level of a family or a proxy for the non-material (intellectual) resources of the family (that could allow the parents to manage better possible family conflicts and complex circumstances). Evidently, the parents' education represents even other things. Psychological literature does not handle this topic expressly, although there are some suggestions that more educated parents may have behaviours (e.g., less time for their children, less direct communication with them) that have negative effects on the psychological status of children. West (1997), in particular, suggested that parents with a higher education may have higher expectations, and thus, place higher pressure on children. Further, more thorough analyses are needed to explore the meaning of this association.

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Appendix

Table A: *Adolescents' emotional status according to their family structure.*

	Both biological parents	***One biological/one step-parent***	***Widowed single-parent***	***Separated single-parent***	***Total***
Mean VT	78.60	75.86	78.48	77.99	78.49
Mean MH	82.76	78.87	80.56	81.49	82.51
Mean MCS	53.61	51.88	53.15	53.09	53.52
Total (n)	4,544	110	135	437	5,226

Table B. *Percentage distribution of covariates for the sample of adolescents aged 14-17.*

Individual and family characteristics	**%**	**Individual and family characteristics**	**%**
Family characteristics:		**Presence of siblings**	
Family structure		The adolescent is the only child	16.7
Both biological parents	86.9	One or more siblings	83.3
One biological/one step-parent	2.1	**Average parental age**	
Widowed single-parent	2.6	Mean value	50.0
Separated single-parent	8.4	Standard deviation	7.7
Family's economic status			
Sufficient	66.9	***Individual characeristics*:**	
Poor or insufficient	33.1	**Adolescent's gender**	
Family's highest educational level		Male	51.8
High	14.0	Female	48.2
Middle	33.6	**Adolescent's age**	
Low	52.4	14	25.0
Parental physical health (PCS)		15	24.8
Mean value	45.4	16	24.6
Standard deviation	5.1	17	25.6
Parental mental health (MCS)		**Adolescent's physical health**	
Mean value	52.3	Without any limitations	87.8
Standard deviation	5.8	With weak limitations	5.1
Region of residence		With moderate or stronger limitations	7.1
North	34.2	**Who answers to sub-questionnaire***	
Centre	15.9	Adolescent	61.8
South	49.9	Other components of the household	34.5
		Missing	3.7
N° of cases (Total = 100):		**5,226**	

* = part of the questionnaire referred to psychological health.

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