

SEE HOW THEY GROW

Dr. Owen Corrigan
Trinity College Dublin

Solo and unmarried – cohabitant parenthood and crisis pregnancy in Ireland

An analysis of the Growing Up in Ireland 9-
month old infant cohort data

June 2013



treoir
The National Federation of Services for
Unmarried Parents and their Children

HE
Heilbrunnstraße 10, 10119 Berlin
Health Service Executive

crisispregnancyprogramme





Founded in 1976, Treoir is a membership organisation that promotes the rights and best interests of unmarried parents and their children.

Treoir

- Operates the free, confidential **National Specialist Information and Referral Service** on all aspects of unmarried parenthood for
 - ✓ unmarried expectant parents
 - ✓ unmarried parents living apart
 - ✓ unmarried parents living together
 - ✓ teen parents
 - ✓ opposite and same sex parents
 - ✓ grandparents and other relatives
 - ✓ those working with unmarried parents and their families.
- Advocates on behalf of unmarried parents and their children.
- Co-ordinates the 11 local **Teen Parent Support Programmes** at national level.

Treoir Principles

1. Treoir recognises the diversity of family life in Ireland
2. Treoir recognises that all families, including unmarried families, have the same rights to respect, care, support, protection and recognition
3. Treoir supports and promotes the rights of all children as outlined in the United Nations Convention on the Rights of the Child
4. Treoir believes that all children have a right to know, be loved and cared for by both parents.

Contents

Foreword.....	4
Executive Summary.....	7
1. Introduction	12
1.1. Introduction and Aims	12
1.2. Background	13
1.3. Growing up in Ireland Study & Methodology	14
1.4. Literature on Unmarried-cohabitant and Solo Parents.....	16
1.5. Descriptive Statistics	19
2. Crisis Pregnancy.....	21
2.1. Defining Crisis Pregnancy.....	21
2.2. Crisis Pregnancy and GUI.....	23
3. Unmarried-cohabitant and Solo Parents: Life and Lifestyle	32
3. 1. Health	32
3.2. Welfare.....	38
3.3. Childcare	41
3.4. Work.....	47
4. Fathers.....	53
4.1. Married and Unmarried-cohabitant parents	53
4.2. Solo parents: contact with Baby's Father	56
5. Policy Implications.....	59
6. References.....	61
7. Appendix.....	63

Author's Acknowledgments

Many thanks are due to Margaret Dromey and Margot Doherty at Treoir and to Anthony McCashin at Trinity College Dublin for their support throughout this project. I am most grateful to the School of Social Work and Social Policy at Trinity College Dublin where I was attached as a Research Associate while undertaking the analysis for this report. Finally, many thanks are also due to the HSE Crisis Pregnancy Programme for the generous funding which made the research possible and to the ESRI and Central Statistics Office for making the relevant data available. Any errors and omissions are the responsibility of the author.

Dr. Owen Corrigan

The views expressed in this report are those of the author and do not necessarily reflect the views of policies of the sponsors.

Foreword

From its inception in 1976 Treoir has campaigned for the initiation of a national longitudinal study of children in Ireland in order to ascertain the outcomes for the children of unmarried parents. Treoir persisted over the years with its aspiration to get the study on the political agenda and finally succeeded some 30 years later, when the Growing Up in Ireland Study was initiated.

For the first time in Ireland data has been collected on a large cohort of infants (11,134) who were nine months old when the data was collected in 2008/9. While a considerable amount of data was collected (some 649 variables), Treoir was specifically interested in data on the health, welfare, childcare and work arrangements of unmarried families. In addition some information was sought on the involvement of fathers in the lives of their children.

Family structure is changing dramatically in Ireland and nearly 60% of births outside marriage are now to families where both parents are residing at the same address. It was therefore, imperative to examine the data in relation not only to solo unmarried parents but also in relation to unmarried parents living together who are also the client group of Treoir. Outcomes for these groups were compared to those for married families who are the 'reference category' in the study.

This study confirms much of what we know about Solo parents – that they tend to have low levels of education, are poor, are 10 times more likely than Married parents to be welfare dependent, are less likely to be working, fare worst of all on all deprivation measures as compared to other family types and their health outcomes are worse for the children of Solo parents and for the children of smokers. In addition, the average age for Solo parents is 10 years less than the average age for Married parents.

Just under 60% of Solo parents reported that their household did not receive any social welfare payments whatsoever, with the exception of universal payments. Only 27.7% reported that they were claiming One-Parent Family Payment (OFP) when their children were 9 months old. These findings raise questions with regard to the substantial proportion of Solo parents who were not receiving OFP but yet would appear to be in the lowest income quintile. This needs further investigation.

For the first time in Ireland we have data on Unmarried-cohabitant parents - who generally fare worse than Married parents on most measures, but generally do better than Solo parents. For

example, in comparison with Married parents they are less well educated, are poorer, 2.3 times more likely to be welfare dependent and score less well on deprivation indicators. More needs to be known about this group.

At the same time, Unmarried-cohabitant parents are seen in this analysis to share parental responsibilities on a more equal basis than Married parents, in a manner that was statistically significant.

Meanwhile, compared to Married parents, Unmarried-cohabitant parents and Solo parents are more likely to experience crisis pregnancy. Crisis pregnancy itself is seen here to be significantly correlated with depression, but is not significantly associated with affection felt towards one's child.

Given the current government policy of ceasing payment to recipients of One-Parent Family Payment (OFP) when their youngest child is seven the data which was collected on childcare arrangements is interesting. It illustrates that while the most important reason cited in choosing the main type of childcare across all marital status groups is the quality of care, Solo parents and Unmarried-cohabitants were significantly more likely than Marrieds to report that their childcare decisions were determined by financial constraints.

More importantly, a greater proportion of Solo parents compared to other marital status types reported childcare difficulties preventing them looking for a job or engaging in study or training. They were also more likely to leave study/training due to difficulty in arranging childcare. The issue of childcare, combined with the lower levels of education of Solo parents and the fact that 60% of Solo parents are in the lowest income quintile should inform policy decisions. The focus for policy makers should be on increasing childcare facilities and improving the levels of education of Solo parents. This would increase their earning capacity, and give access to jobs that pay an adequate wage and lift Solo parents out of poverty on a more permanent basis.

This Report provides baseline data on unmarried parents, living together or apart and some outcomes for their children. The GUI has followed up these nine-month-olds when they were three years old. Thanks to funding from the HSE Crisis Pregnancy Programme, Treoir is in a position to commission an analysis of this new data. Much will be learned from this longitudinal data, particularly about the movement in and out of one-parent families and how this impacts on the lives of children, and also on other aspects of the lives of these children.

We are particularly grateful to the HSE Crisis Pregnancy Programme for funding this initial study and for agreeing to fund the follow-up, which is due to be completed at the end of 2013. Special thanks

are due to Dr. Owen Corrigan, who undertook the work. He brought his considerable expertise on working with large data sets to bear on the project. Anthony McCashin, of Trinity College Dublin, provided an enormous amount of support to Treoir and to Dr. Corrigan during this project.

Margaret Dromey and Margot Doherty of Treoir have been involved in promoting a national longitudinal study of children over many years and supported Dr. Owen Corrigan throughout this study.

Leonie Lunny

Chairwoman

Treoir

December 2012

Executive Summary

Crisis Pregnancy

Crisis pregnancy has been defined as "a pregnancy which is neither planned nor desired by the woman concerned, and which represents a personal crisis for her".¹ Utilising indicators of both intentions and stress concerning pregnancy it was possible, first, to assess the factors associated with two types of 'difficult pregnancy', labelled 'Unintended' pregnancy and 'Stressful' pregnancy:

- Unmarried-cohabitant parents are significantly more likely than Married parents to experience either Unintended or Stressful pregnancy.
- Solo parents are more likely than Marrieds to experience Unintended pregnancy, but there is no significant difference as regards experiencing Stressful pregnancy.
- Age matters, and the older a woman is the less likely she is to experience either Unintended or Stressful pregnancy, however likelihood of experiencing either type seems to be greatest at either end of the age spectrum, declining in the middle before rising again.
- A higher number of children in household as well as poor health and being a non-native English speaker were all factors predicting a higher likelihood of reporting difficult pregnancy (though see the chapter itself for details).
- Getting enough help or support around the home in the months after birth was not significantly related to either type of difficult pregnancy, nor was having a family history of poverty or working part-time before pregnancy.
- Complications in pregnancy predicted a much higher likelihood of having experienced a Stressful pregnancy.
- Rural-dwelling women were slightly less likely to experience Unintended pregnancy.

Combining indicators of intention and stress around pregnancy two types of 'Crisis Pregnancy' were then defined, where pregnancy was *both* unintended and stressful at the same time. The broader and more general type where stress was due to any reason whatsoever, was labelled 'Generalised Crisis' (GC) while the instance where the stress experienced was attributable *solely* to the pregnancy itself was labelled 'Pregnancy Crisis' (PC):

¹ Statutory Instrument No. 446/2001.

- In either case marital status matters, and Unmarried-cohabitant parents and Solo parents are more likely than Married parents to experience crisis pregnancy.
- In the case of Generalised Crisis, economic differences do seem to matter, with the better off less likely to experience this type of crisis.
- For Pregnancy Crisis there are few significant differences by household income quintile.
- The age effects are similar to those for difficult pregnancy.
- A higher number of children living in the household, poor health and complications in pregnancy all predicted a higher likelihood of experiencing crisis pregnancy.
- Those reporting after pregnancy that they received enough support and help from friends and family outside the household were significantly less likely to have experienced a GC. Such external support did not help to predict PC however, indicating that this affects women regardless of the level of external support available to them.
- Women living rurally were significantly less likely to experience a GC, but urban/rural distinctions made no difference to the likelihood of experiencing a PC.

Using the crisis pregnancy indicators it was possible to test the effects of crisis pregnancy on various outcomes:

- Both crisis pregnancy indicators were significantly and positively correlated with higher scores on the index of depression available in the dataset.
- Crisis pregnancy indicators were not significantly associated with affection felt towards one's child.
- Crisis pregnancy did not significantly predict birth weight.
- Using crisis pregnancy as a predictor of the likelihood of drinking while pregnant it was seen that those who experienced a Generalised Crisis pregnancy had significantly higher odds of engaging in this practice (compared to those who had not experienced this type of crisis pregnancy).

Health

- Unmarried-cohabitant and Solo parents tend to have worse health practices and worse behaviours during pregnancy. Incidence of smoking generally and during pregnancy is higher than for Married parents. However, Married parents have a tendency to drink alcohol more often, though not during pregnancy.

- Health outcomes (being 'almost always unwell') were worse for the children of Solo parents and also for the children of smokers.
- Unmarried-cohabitant and Solo parents were less likely to have had their child's vaccines administered in the later stages (4 or 6 months) of the child's development, but there were no differences for early vaccinations (at 2 months).
- Solo parents were likely to discover they were pregnant at a later stage than other parents.
- Unmarried-cohabitant and Solo parents were more likely than Married parents to wait longer before their first antenatal appointment and were less likely to be breastfeeding their children at 9 months.
- Crisis pregnancy, variously defined (more in a later section), was seen to be a significant predictor of undesirable health outcomes for infants and lower odds of parents having had their child vaccinated.

Welfare

- Unmarried-cohabitant parents are more likely to be on unemployment benefit and on rent supplement than Married parents; they are more likely to be welfare dependent and to live in a household which is in receipt of at least one type of welfare payment; they are also more likely to experience certain types of material deprivation.
- Solo parents are 10 times more likely to be welfare dependent, 9 times more likely to be on rent supplement, much more likely to experience all types of material deprivation measured in the GUI data, and half as likely as Married parents to be on unemployment benefit.

Child Care

- Unmarried-cohabitant and Solo parents were more reliant on their relatives for help with childcare; Solo parents were more reliant on grandparents for babysitting and helping round the house.
- Both Unmarried-cohabitant and Solo parents were more likely to receive financial help from grandparents with higher frequency than Married parents.

- Financial constraint was an important determinative factor in choice of childcare arrangements for both Unmarried-cohabitant and Solo parents, more so than for Married parents.
- Childcare difficulties made it significantly more difficult for Solo parents to look for work or engage in study in comparison to Married parents, and also made it more likely that Solo parents had to leave study/training they were already engaged in.
- Married parents were significantly more likely to report that childcare had prevented social activities than other marital status types.
- Unmarried-cohabitant and Solo parents were more likely to report that they got enough external help.
- Those who experienced crisis pregnancy were less likely to report that they received enough external help and support.

Work

- Married parents worked longer into pregnancy than Unmarried-cohabitant parents and Solo parents. These differences were explicable in terms of socio-demographic factors.
- Unmarried-cohabitant parents returned sooner to work than Married parents, controlling for other factors, and Solo parents returned soonest of all three groups.
- Unmarried-cohabitant and Solo parents were less likely than Married parents to take paid or unpaid maternity leave, or annual leave.
- 71% of parents not yet back to work indicated an intention to return to work either full-time or part-time. 59% of these parents cited financial reasons as the most important reason for doing so.
- Of those not intending to enter the workforce, having never held a job outside the home, Married parents were significantly more likely to state that they preferred to stay home to mind their children themselves.
- Solo parents were more likely than other marital status groups to cite their inability to pay for childcare as the most important reason for not working outside the home.
- For those who worked, Solo parents worked fewer hours.

- Unmarried-cohabitant parents were twice as likely as Married parents to work part-time.
- Unmarried-cohabitant parents earn less than Married parents and Solo parents earn much less.

Fathers

- Fathers in Unmarried-cohabiting families have poorer general health and smoking habits, though they drink less than fathers in Married families.
- Fathers in Unmarried-cohabiting families were significantly more likely to share parenting duties and engage with their child across a range of indicators of parental involvement than were Married fathers.
- Among Solo parents, one quarter had no contact whatsoever with the father of their child.
- Among Solo parents, 50% of children's fathers made no financial contribution to maintenance.
- Less than one in five Solo parents cohabited with the father of their child before birth. Only 6% were ever married to the father of their child.
- Crisis pregnancies were significantly associated with reduced likelihood of contact with the child's father after birth and reduced likelihood of receiving financial support from the father.
- Absence of parental contact or financial contribution was not associated with a range of health outcomes, though lack of financial support did predict lower birth weight.

1. Introduction

1.1. Introduction and Aims

Treoir, the National Federation of Services for Unmarried Parents and their Children, in association with the HSE Crisis Pregnancy Programme and Trinity College Dublin, commissioned a research project to analyse the Growing Up in Ireland data. The dataset used was Wave 1 of the Infant Cohort (9-month-olds).

A brief was agreed concerning the aims and purpose of the research which stated that the project should:

- Analyse the data on pregnancy related problems, specifically intentions around becoming pregnant as well as stress;
- Analyse socio-economic, health and parent-child relationships with a specific focus on the situation of Unmarried-cohabitant parents;
- Explore whether a measure of crisis pregnancy was extractable from the data and show whether it could be used in subsequent analysis;
- Assess factors affecting contact of fathers with their children in the case of single-parent households.

The overarching aim was to produce a report focused on these substantive areas with the intention of informing evidence-based policy recommendations to be made at a later date by Treoir. The study comes in the context of changing family structures in Ireland. The proportion of households composed of single parents with dependent children, for example, has increased from 6.4% in 2004 to 8.9% in 2010.² This compares with an EU27 average of 4% in 2010 and a UK average of 5.9% in the same year. The divorce rate increased in Ireland by 70% between the 2002 and 2006 censuses, following the legalisation of divorce in 1996 (CSO 2007). Marriage rates have fallen among those in their 20s and risen for those in their 30s with this delay in entering marriage attributed partly to people delaying the formation of any kind of partnership and also to the rapid increase in cohabitation among younger adults (Lunn, Fahey, and Hannan 2010). By 2006 twice as many 25 year-olds were cohabiting as were married (Ibid.). These changes in traditional family structures make an analysis of the most recent data on child outcomes both relevant and timely.

² Eurostat statistics, 'Distribution of households by household type from 2003', extracted from SILC 2003 and available from <http://epp.eurostat.ec.europa.eu/>

1.2. Background

From its foundation in 1976, Treoir, formerly the Federation of Services for Unmarried Parents and their Children, was convinced of the need for a national longitudinal study of children to ascertain the outcomes for the children of unmarried parents.

Treoir was very concerned about the over-representation of children of unmarried parents in state care and was keen to ascertain: what factors lead to children of unmarried parents coming into care; what percentage of women who have non-marital children keep them and raise them in a one parent family; how they fared in terms of general health and emotional wellbeing in comparison with children in other families; what were the social and financial circumstances of unmarried mothers raising children alone; and what kind of movement there was in and out of one-parent families.

The idea of the study was first mooted by Treoir in the early 1980s and discussions on the possibility of initiating the study were held with various bodies over the years including the Economic and Social Research Institute, the Combat Poverty Agency, the Health Research Board, the health boards, maternity hospitals etc. Funding was sought from numerous sources including the Ford Foundation, Ireland American Fund, the European Commission, Carnegie Corporation, Millennium Fund, as well as various sources in Ireland, without success.

In 1993, on behalf of Treoir, the ESRI prepared a paper “National Child Development Study – proposal for the initiation phase”. In 1998, concerned at the lack of progress, Treoir commissioned “See how they Grow – a proposal for a longitudinal study of children in Ireland” in an effort to progress the project. Treoir also made a case for the study to the Commission on the Family which resulted in a recommendation for the study being included in the Commission’s final report in 1998.

Staff of Treoir met with personnel involved in the National Child Development Study in Britain on a number of occasions and sought their assistance in promoting the study. On their advice a group “Friends of the longitudinal study” was brought together by Treoir and a campaign was designed and initiated. Meetings were held with Ministers and senior public servants in the Departments of Social Welfare and Health. This resulted in the Cabinet Sub-committee on Social Inclusion giving approval for a detailed proposal outlining the scope, methodology, management arrangements and costs involved in such a study being prepared and funded by both Departments. The design brief, produced by a consortium of researchers, was submitted in July 2001.

1.3. Growing up in Ireland Study & Methodology

The Growing Up in Ireland study was commissioned by the Irish Government and funded by the Department of Health and Children through the Office of the Minister for Children and Youth Affairs in association with the Department of Social Protection and the Central Statistics Office. Work on the project began in April 2006 by a research consortium led by the Economic and Social Research Institute (ESRI) and Trinity College Dublin (TCD). (Quail et al. 2011)

The 11,134 children representing the nine-month cohort were born between 1st December 2007 and the 30th June 2008 and data collection for that group took place between September 2008 and April 2009. Full details of the sampling procedure and design methodology of the GUI can be found in the supporting documentation to the study (Quail et al. 2011).

Methodology of this study

The data were analysed using a range of descriptive and analytic techniques from simple summaries to hypothesis-testing techniques of regression analysis. These techniques include: ordinary least squares regression, for use with scale variables; logistic regression, for use with binary (Yes/No; 1/0) variables; ordered logistic regression, for use with ordered categorical variables. More information on these techniques can be found in numerous sources (StataCorp 2009a; StataCorp 2009b; Wooldridge 2009). In a basic sense, regression analysis is simply a means of estimating the relationships between variables, specifically the effect of one or more 'independent' variables on an outcome ('dependent') variable of interest.

The method is powerful as it allows the researcher to control for the effect of other factors related to the outcome variable. These might be factors that we know to be related to the outcome variable in fact, or factors that we hypothesise will have an effect on that variable. For example, we might estimate the effect of education level on earnings; generally higher education levels will predict higher levels of earnings. However it is important to also control for other determinants of earnings so that we get an accurate picture of the true relationship of these variables. We might control in this instance for age, say, on the basis that older people are likely to have higher earnings than younger people. Controlling for this and other factors provides a more accurate estimate of the effect of education, net of the effects of other explanations for the outcome variable (i.e. earnings).

All estimates in statistical analysis are precisely that: estimates. As such they come with upper and lower bounds and greater or lesser degrees of certainty. Highly uncertain estimates (i.e. a wide interval between upper and lower bounds) imply a weak or absent relationship between two variables: the data is simply random and one variable does not help to 'explain' the other. This is what is called a non-significant relationship, and is not of analytic interest. When something is

statistically 'significant' this should not be read to mean that it is necessarily 'important' or even interesting, merely that there is a systematic, i.e. non-random, relationship between the variables in question. In such a case, the effect of one variable on another in the sample is simply 'significantly different from zero' (where zero is the null hypothesis of no effect); meaning there is likely to be an actual effect in the population. The significance level chosen by the researcher indicates how likely a result is due to chance. The standard significance level in the social sciences is 5% and this is the level applied throughout this research (except where otherwise noted). An estimate of an effect that is 'significant at the 5% level' implies that there is only a 5% chance that the effect is due to random fluctuations in the data.

The marital status variable used here was coded into three categories for ease of presentation and interpretation of results, after the approach adopted by Kiernan (2005). These categories were labelled 'Married', 'Unmarried-cohabitant' and 'Solo' and were defined by 1. Marital status, 2. Presence or absence of a cohabiting partner (Kiernan 2005). In all statistical comparisons between marital status groups the 'reference category' is Married parents, unless otherwise noted; this means that a reported 'significant difference' for e.g. Unmarried parents has been calculated *relative to Married parents*. The categories have the following properties (numbers do not sum to 11,134 due to missing data on the marital status variable³):

- **Married:** comprises all respondents who were 'ever married', i.e. marital status is one of currently married, married and separated, or divorced/widowed (N=7663). All people in this category are cohabiting with a partner. It should be borne in mind that logically this group will include those who were formerly married to one partner but are now cohabiting with another partner; this is a small subcategory of respondents (N=177).
- **Unmarried-cohabitant:** this category comprises only those who responded as 'never married' and all also have cohabiting partners. (N=1998)
- **Solo:** this category combines single parents (all female), all of whom 'never married' (N=1167) and lone parents (all female) who were either 'married and separated' (N=128) or 'divorced/widowed' (N=42). The numbers of lone parents were deemed too small to warrant investigation in a separate category. None of the respondents in this category has a cohabiting partner.⁴

The results of all statistical analyses and graphs were weighted using the population weights in the dataset. All results and categorical comparisons are listed because they are statistically significant at

³ Of the 136 missing cases we know that they were mostly relatively poor (48% in the lowest income quintile), with a median of 1 other child in the household, a median age in the range 26-31, and with 84% reporting a cohabiting partner.

⁴ There were 38 males in the dataset who are recorded as the Primary Caregiver; however all are cohabiting with a partner. (29 married and cohabiting; 2 married and separated; 7 unmarried-cohabitant).

the 5% level, unless otherwise noted. For reasons of space and presentation, not every individual regression table and significance test is presented in the text, though some important regression results are included in the appendix. Interested readers should contact the author for further detail or results tables on any individual result. Any errors and omissions are the author's own.

1.4. Literature on Unmarried-cohabitant and Solo Parents

This section explores the situation of unmarried parents of 9-month old infants in Ireland in terms of their demographic, social, labour market and other characteristics. Differences between Married and Unmarried-cohabitant parents, as well as between Married and Solo parents, across a range of life and outcome indicators are the central analytic focus.

Much has been written about the import of family structure for both parent and child outcomes. Often these outcomes are related in a complex and interdependent manner. One such interdependency concerns stress theory which Gennetian identifies as one of the four broad theoretical paradigms that have been used to explain the impact of family structure on outcomes (Gennetian 2005). This perspective hypothesizes that changes, such as divorce, remarriage, relocation or unemployment, redefine family roles (Gennetian 2005). The other three perspectives include: 1) Economic hardship theory, which posits that a lower level of resources in certain family types reduces children's attainment; 2) Role model theory proposes that different family structures provide different role models that then shape children's behaviour and values; 3) Social control theory posits that differences in how children's behaviour is monitored lead to different outcomes (Gennetian 2005).

On the stress perspective, evidence has shown that mothers who exit co-residential relationships with biological fathers or enter co-residential relationships with non-biological fathers reported higher levels of parenting stress than mothers in stable co-residential relationships (Cooper et al. 2009). Further studies have shown that maternal stress is implicated in children's behavioural problems, suggesting that measures aimed at reducing maternal stress may improve child well-being (Osborne and McLanahan 2007). Likewise, evidence shows that mother's psychological functioning and the quality of the home environment are particularly important for children's behaviour (Carlson and Corcoran 2001). In general, maternal stress has been seen to be associated with sub-optimal parenting and, as a result, is correlated with negative outcomes for children in terms of social, behavioural and emotional competences (Cooper et al. 2009; Thompson Jr et al. 1993; Anthony et al. 2005).

One major source of maternal stress includes low socioeconomic status (Orr et al. 1989) and this, in itself, is usually correlated with marital status (Fuchs 2004). Indeed, as noted, studies have demonstrated that a major part of the effect of family structure on child outcomes has to do with

availability of economic resources (Thomson, Hanson, and McLanahan 1994; Gennetian 2005).

Economic constraints are likely to impact on the decisions that parents make in terms of their engagement with the labour market and with childcare arrangements. Poor single mothers may choose to forego formal childcare arrangements and thus spend more time caring for their child themselves than do Married or Unmarried-cohabitant parents, as evidence from the US and UK suggests (Kalenkoski, Ribar, and Stratton 2007). Furthermore, affordability constraints seem likely to impact on the quality of childcare taken up by mothers (Waldfogel 2002). Such constrained decisions come with implications for mother and child where, for example, it has been shown that the quality of childcare impacts directly on child cognitive development and outcomes (Burchinal et al. 2000). The role of family members becomes important where formal childcare is not an option and studies have found that, for children in poverty, grandmother care was one of the most beneficial arrangements for cognitive development (Baydar and Brooks-Gunn 1991).

Related to childcare is the issue of maternal employment. In some family structure types it may prove more desirable for mothers to seek employment so as to overcome economic constraints. Whether and when mothers choose to do so also has implications for their children. Research shows that maternal employment by the ninth (9th) month was found to be linked to lower school readiness scores at 36 months⁵; these effects were more pronounced when mothers were working 30 hr or more per week and the results remained robust even controlling for quality of childcare and quality of home environment (Brooks-Gunn, Han, and Waldfogel 2002). Others have found that employment in the first 12 months of the child's life had detrimental effects on the cognitive and behavioural development of all children regardless of gender or poverty status (Baydar and Brooks-Gunn 1991). Similarly, in the US, first-year maternal employment was seen to be associated with lower vocabulary scores for White children (Berger et al. 2008).⁶

Family structure cannot be seen simply as a static construct defined by presence/absence of marriage and/or presence/absence of father however. Even in single parent families there may be a continuum of contact with the other parent (usually the father), ranging from frequent social contact with the child and forthcoming financial support to complete absence of any contact. It has been shown that children who grow up apart from their biological fathers do less well, on average, than children who grow up with both natural parents; they are less likely to finish high school and attend college, less likely to find and keep a steady job, and more likely to become teen mothers (McLanahan 1999).

⁵ Bracken School Readiness Assessment: an individual cognitive test in the US for children from pre-kindergarten to the second grade (7/8 years old).

⁶ But not Black or Hispanic children.

Others have found that frequency of visitation and closeness of relationship to father showed no consistent influence on measures of child well-being including academic difficulty, problem behaviour and psychological distress, though these same authors found that paternal economic support did reduce the likelihood of problem behaviour (Furstenberg, Morgan, and Allison 1987). In a meta-analysis of 63 studies dealing with non-resident fathers and children's well-being it was seen that fathers' payment of child support was positively associated with measures of child well-being; meanwhile the frequency of non-resident father contact was not seen to be related to child outcomes in general (Amato and Gilbreth 1999). Others find limited evidence that *either* father visitation or payment of child support have any positive benefits for child wellbeing (King 1994). Simple contact may not be sufficient then, and some studies found the *quality* of parenting by non-residential fathers to be the determinative factor, with this being related to externalising problems for children (Simons et al. 1994).

Contact with father also has clear implications for mothers themselves. Unmarried parents reported more mental health and behavioural problems than did married parents, and unmarried parents whose relationships ended before the birth reported more impairment compared with other groups of unmarried parents (DeKlyen et al. 2006). Single mothers have been seen to be twice as likely as their married counterparts to experience financial hardship and also to suffer from poor self-esteem and lack of support, as a result of which their propensities towards depression were greater (Brown and Moran 1997).

Depressive symptoms were associated with the quality of the mother—non-resident father relationship and this relationship with the frequency of non-resident fathers' contacts with their children (Jackson and Scheines 2005). In other words, more contact between non-resident fathers and their children predicted more adequate maternal parenting, which in turn was associated directly with the children's subsequent outcomes (Jackson and Scheines 2005). How parents cooperate was also important, with one study concluding that parents' ability to work together in rearing their common child across households helps keep non-resident fathers connected to their children and that programs aimed at improving parents' ability to communicate may have benefits for children irrespective of whether the parents' romantic relationship remains intact (Carlson, McLanahan, and Brooks-Gunn 2008).

1.5. Descriptive Statistics

Below follow some tables relating descriptive statistics by marital status. The first two tables show education levels by marital status and income quintiles by marital status, while the next table contains averages and some other information on key independent variables used in the analysis.

Table 1 - Education level by Marital status (% by column)

Education level	Marital Status			Total
	Married	Unmarried	Solo	
None/Primary	1.82	2.10	6.50	2.44
Secondary	21.12	36.94	56.95	28.31
Vocational/Non-Degree	32.99	36.54	26.44	32.84
Degree/Professional	27.19	16.77	7.40	22.91
Postgraduate	16.88	7.66	2.72	13.50
Total	100.00	100.00	100.00	100.00

Table 2 - Income quintiles by Marital status (% by column)

Equivalised Household Annual Income - Quintiles	Marital Status			Total
	Married	Unmarried	Solo	
Income Quintile 1	13.72	26.16	59.18	21.31
Income Quintile 2	16.60	22.71	25.25	18.73
Income Quintile 3	20.40	20.67	10.35	19.27
Income Quintile 4	25.07	19.38	3.62	21.52
Income Quintile 5	24.21	11.09	1.60	19.16
Total	100.00	100.00	100.00	100.00

Note: Income quintile 1 is the lowest quintile representing those with the lowest earnings.

Table 3 - Average values of key independent variables by marital status

<i>Variable</i>	<i>Married</i>	<i>Unmarried</i>	<i>Solo</i>
Age (5 yr blocks)*	31-35	26-30	21-25
Number of children in household*	1.11	0.67	0.75
Worked part-time before birth	22	21	25
Worked full-time before birth	57	60	39
Welfare dependency ¹	4.5	12	38
Respondent is a smoker	16	39	52
Had complications during pregnancy	52	56	61
Presence of a chronic disability	11	12	13.5
First language is English	81	82	85
Lives rurally	58	54	44

Note: * all figures reported are percentages unless marked with an asterisk (*); Unmarried refers to Unmarried-cohabitants; ¹ Income = 100% welfare benefits.

2. Crisis Pregnancy

2.1. Defining Crisis Pregnancy

The GUI data contain important information on the experiences and intentions of women around their pregnancies. Specifically, questions ask about whether pregnancy was intended, at that time or a later time, and whether women experienced any stress during the pregnancy, either directly due to the pregnancy itself or for other reasons. This facilitates an exploration of the idea of crisis pregnancy and the factors associated with the experience of crisis pregnancy.

What, however, is meant by a 'crisis pregnancy'? Crisis pregnancy is defined under Statutory Instrument as "a pregnancy which is neither planned nor desired by the woman concerned, and which represents a personal crisis for her" (S.I. No. 446/2001). This definition also includes the experiences of those women for whom a planned or desired pregnancy develops into a crisis over time due to a change in circumstances. For men and women, the fact that the pregnancy was not planned or that they were too young at the time were the most common reasons why the pregnancy was viewed as a crisis (McBride, Morgan, and McGee 2012). At the same time, a pregnancy that is unplanned or unexpected does not necessarily equate to its being a crisis in the eyes of the woman involved.

While crisis pregnancy is specific to the Irish context, internationally factors relating to unintended pregnancy or unplanned pregnancies are measured and explored. In an international perspective, much research around unintended pregnancy has focused on the experience of teenagers and on the tacit assumption that teenagers do not want to become pregnant. But an important seam in that research reveals an underlying ambivalence among certain sub-groups of teenagers. One study of mostly poor American adolescents found that, when asked about non-use of contraception, one in five replied that they did not mind if they became pregnant, with a similar proportion stating that they actively wanted to become pregnant (Stevens-Simon et al. 1996). Similarly, a study of the US National Survey of Family Growth found that 18% of teenage pregnancies were intentional (Forrest and Singh 1990). Other research found that one in six US adolescents showed some ambivalence towards pregnancy, and that this ambivalence could help to predict pregnancy occurring in the following year (Jaccard, Dodge, and Dittus 2003).

The Irish Contraception and Crisis Pregnancy Study (ICCP-2010) measures ambivalence towards becoming pregnant as a reason for non-use of contraception among adults. The study found that there was a relatively high level of ambivalence towards becoming pregnant among people in their

late twenties to their mid forties, which increased with age; 14% of those aged 26-35 and 22% aged 36-45 citing that they "Didn't/don't care if pregnancy happens" as a reason for not using contraception. Younger adults in the study did not express ambivalence as a reason for non use of contraception, but were more likely to report lack of planning for sex or alcohol and drug use as reasons why contraception was not always used (McBride, Morgan, and McGee 2012, 65).

Research has established that certain demographic and socio-economic characteristics influence the prevalence of crisis pregnancy (McBride, Morgan, and McGee 2012, 89). Rundle et al. (2004) found that the fact of being too young, being unmarried-cohabitant, or being in a difficult or new relationship were all more likely to be associated with women reporting their pregnancy as a crisis. Older women were more likely to see a pregnancy as a crisis as they believed that their family was already complete. Younger women or women with a pre-Leaving Certificate education were more likely than older women or women with higher levels of education to have experienced a crisis pregnancy (McBride, Morgan, and McGee 2012).

The experience of crisis pregnancy is not limited to age or intention and planning however. There are many other reasons why a pregnancy can represent a crisis for the woman concerned. Women who become pregnant unexpectedly must consider how a pregnancy will impact on other dimensions of their lives, including their personal relationships, their job, their education, their health and their financial situation. While, as outlined above, the most common reasons cited as to why a pregnancy constituted a crisis were that it was "not planned" or that the woman involved was "too young", financial reasons were more commonly cited in 2010 compared to 2003 (9% of women in 2010 vs. 2% in 2003).

The proportion of women with experience of pregnancy self-reporting experience of a crisis pregnancy over their lifetimes has increased between 2003 and 2010 from 28% to 35%. However, the proportion of pregnancies experienced as crises by women was seen to decrease with age in both ICCP surveys: 44% among 18 to 25 year olds in 2010 (41% in 2003), 19% of 26 to 35 year olds (15% in 2003) and 11% of 36 to 45 year olds (7% in 2003).

In a wide-ranging Irish study in the 1990s it was seen that women with crisis pregnancies were typically younger and single, without a stable relationship, but not differing from other pregnant women by occupation or by educational level (Mahon, Conlon, and Dillon 1998). For most women it was likely to be their first pregnancy, however the sample also included married women in their forties, and separated women who already had children (Mahon, Conlon, and Dillon 1998). In that study, 17% of women described their initial response to their pregnancy as 'unexpected', 12.5% as 'shock' and 3% as 'crisis'. This latter definition of 'crisis' was self-description on the part of the study participants.

Acknowledging the traumatic aspect of crisis pregnancy will be an important aspect of any attempt to assess and explain the phenomenon. In ICCP-2010 approximately one in three women who had been pregnant said they would describe one of their pregnancies as one which represented a personal crisis or emotional trauma. Those experiencing a crisis pregnancy were found to have higher psychological distress than the general population at the time of pregnancy, as measured using a metric of emotional wellbeing (McBride, Morgan, and McGee 2012, 104).

Of those who experienced a crisis pregnancy, the vast majority chose to parent the child. In the 2010 study the outcomes of crisis pregnancies were as follows; parenthood (62%), miscarriage (14%), abortion (21%). In the 2003 survey, 75% of crisis pregnancies resulted in a live birth. Other outcomes included: 15% of crisis pregnancies ending in abortion; 6% ending in miscarriage; 1% in still birth; while 3% were still currently pregnant at the time of the research.

2.2. Crisis Pregnancy and GUI

In the context of the GUI data for 9-month old infants it should be clear that the available data will constrain the ways in which we can talk about crisis pregnancy. One obvious point is that we are dealing with data collected only from women whose pregnancy resulted in live birth. The issue of abortion and crisis pregnancy ending in abortion - while clearly highly important - cannot be addressed with the data available here. As such these results cannot be representative of the entire population of all of those experiencing crisis pregnancy. Likewise, no questions were asked of respondents to the GUI regarding self-evaluations of whether their pregnancy constituted a crisis or not. However the dataset does contain important information on both intentions towards falling pregnant and associated stress levels at time of pregnancy, as well as indicators on whether associated stress was due primarily to the pregnancy itself or to other factors (or both).

As such the GUI allows us to categorise women as experiencing different types of 'difficult' pregnancy according to the presence/absence of specific factors as well as the intensity or otherwise of those factors. The available data ask women: a) whether they ever intended to become pregnant and, if so, when they had intended for pregnancy to occur; b) whether they felt any stress during the pregnancy and the level of stress experienced, i.e. lesser levels to 'a great deal'; c) whether the pregnancy itself was one of the stressors involved; d) whether the pregnancy itself was the *only* stressor involved.

Precisely what combination of these factors should be taken to denote crisis pregnancy is an interesting question of operationalisation in itself. Some women may have been caught unawares by their pregnancy and yet experienced no stress, or experienced stress unrelated to the pregnancy.

Likewise, some women who may have been expecting their pregnancy may have experienced extreme levels of stress. Which of these constitutes a crisis, and what can we say about intermediate combinations of these factors?

As the available data afford us a richness of information it will be productive here to explore more than one definition of crisis pregnancy. This will allow for an assessment of the extent to which such definitional differences have a bearing on how we understand crisis pregnancy and its determinants. It will also allow us to relate different types of crisis pregnancy to important mother/child outcomes in terms of health and, in the case of Solo parents, to frequency of contact with the child's father. The following table (Table 4) records two types of difficult pregnancy and two types of crisis pregnancy defined according to various combinations of the above named factors.

The first two types are more properly labelled 'difficult' pregnancies as opposed to crisis pregnancies as they concern intentionality and stress separately. In order to be labelled a 'crisis pregnancy' respondents must have reported both stress and lack of intentionality as being present concurrently. Taking 'unintended' to refer to those women who either had no intention of becoming pregnant or had an intention to become pregnant 'much later' in their lives, we see that over 16% of women, or about one-in-six, self reported as being in this category. Just under 10% of women in the sample said that they never had any intention of becoming pregnant.

About 16% of women reported that they experienced 'some' or 'a great deal' of stress while pregnant and that this stress was due *solely* to the pregnancy itself. This type we label a 'stressful' pregnancy. Stress experienced during pregnancy in a general way, i.e. for any one of a range of factors, not necessarily the pregnancy itself, was very widespread with almost half of women (46%) reporting some or a great deal of stress while pregnant. Women experiencing a great deal of stress that was attributable solely to the pregnancy itself comprised a very small proportion, at just under 3% of the sample.

Combining both intentionality and stress indicators allows us to define different types of crisis pregnancy. The next two types in the table both refer to 'crisis pregnancies' as they isolate those respondents for whom pregnancy was unintended *and* for whom the pregnancy was simultaneously experienced as stressful. The difference between types lies only in the nature of the stressor. The first type, Generalised Crisis, denotes respondents experiencing this type of crisis pregnancy where the stressor was any one of a number of (unspecified) factors.⁷ The second type, Pregnancy Crisis, denotes respondents experiencing a crisis pregnancy - i.e. unintended *and* stressful - where the *only* source of stress was the pregnancy itself. Those experiencing Pregnancy Crisis are, then, a sub-group of those experiencing Generalised Crisis.

⁷ Potentially including the pregnancy itself.

Table 4 - Types of Difficult and Crisis Pregnancy

		<i>Did you intend to become pregnant before baby was conceived?</i>	<i>At any time during the pregnancy did you feel under any stress?</i>	<i>Stress due to pregnancy?</i>	<i>Stress <u>only</u> due to pregnancy itself?</i>	% of sample	N
Difficult Pregnancy	1. Unintended	'Much later' / 'No intention of ever becoming pregnant'	_____	_____	_____	16.4%	1765
	2. Stressful	_____	Some — A great deal	Y	Y	15.9%	1705
Crisis Pregnancy	3. Generalised Crisis	'Much later' / 'No intention of ever becoming pregnant'	Some — A great deal	Y	N	9.2%	990
	4. Pregnancy Crisis	'Much later' / 'No intention of ever becoming pregnant'	Some — A great deal	Y	Y	3.4%	370

Source: Growing Up in Ireland dataset, Infant cohort Wave 1; author's own calculations.

The means by which we are here defining crisis pregnancy is represented graphically in Illustration 1, overleaf (for illustrative purposes only, image not to scale). The blue shaded area denotes those women experiencing a Generalised Crisis, 9.2% of the total sample, where pregnancy is simultaneously unintended and stressful under the definitions used here. The category of Pregnancy Crisis, an unintended and stressful pregnancy where stress is attributed *solely* to the pregnancy itself, is a subset of Generalised Crisis and applies to 3.4% of women in the total sample.

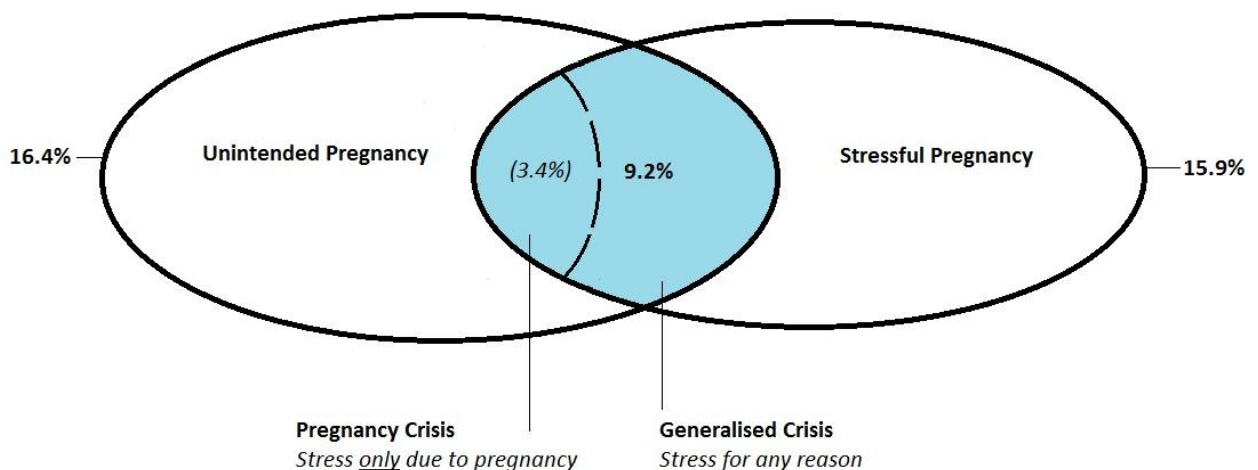


Illustration 1 – Graphical representation of definition of types of Crisis Pregnancy

We next analyse the factors associated with the likelihood of experiencing Unintended and Stressful pregnancy. (All of the regression results discussed in this chapter can be found in the Appendix, presented in the order they are discussed here.)

- Marital status is highly significant and substantively important with regard to Unintended pregnancy, but less so for Stressful pregnancy, controlling for a range of other possible determinants of these types of pregnancy.
- **Unmarried-cohabitant** parents are almost 3 times more likely than Married parents to experience either Unintended pregnancy; but they are only 1.3 times more likely to experience Stressful pregnancy.
- **Solo** parents are 8 times more likely than Marrieds to experience Unintended pregnancy; they are not significantly different to Married parents as regards likelihood of experiencing Stressful pregnancy.
- There is a **significant Age effect** for both Unintended and Stressful pregnancies, with older women seemingly less likely to experience either type; however, there is actually a **curvilinear** effect at work here. In essence, younger women have a higher probability of experiencing either of these types of difficult pregnancy and this declines with age, but with an uptick in probability for women near the top of the age range. For example, in the model for Unintended pregnancy: the probability of experiencing this type is 0.57

for those aged 16, declining to 0.08 for those aged 31, but rising again to 0.10 for those aged 40.⁸

- **Number of children in household** is a highly significant predictor for both types, but has a stronger effect for one; e.g. each extra child in the household increases the odds of reporting an Unintended pregnancy by 36% but increases the odds of reporting Stressful pregnancy by only 18%.
- **Poor health** was significantly associated with both types of difficult pregnancy, predicting higher odds of experiencing either type.
- Getting **enough help or support around the home** in the months after birth was not significantly related to either type of difficult pregnancy, nor was having a **family history of poverty** or **working part-time before pregnancy**.
- **Complications in pregnancy** were a major factor in predicting Stressful pregnancy. Those who experienced complications were almost twice as likely to report this type of difficult pregnancy.
- Whether or not English was a woman's **native language** had a significant effect for one type. Non-native speakers were more likely to experience an Unintended pregnancy, compared to native speakers. (There is a very high overlap between this language indicator and migrant status, with 95% of those reporting that English was not their native language having been born outside Ireland.)
- **Rural-dwelling** women were slightly less likely to experience Unintended pregnancy.

Turning now to consider the two types of crisis pregnancy, we begin by exploring their determinants. Looking to the differences between what has been labelled here a Generalised Crisis (GC) and a Pregnancy Crisis (PC) the results show the following:

- In either case **marital status matters**, and Unmarried-cohabitant parents are three times more likely than Married parents to experience crisis pregnancy while Solo parents are 4-5 times more likely. In the case of Generalised Crisis, economic differences do seem to matter, with the better off increasingly less likely to experience this type of crisis. For Pregnancy Crisis however there are few significant differences by household income quintile.⁹

⁸ Marginal effects calculated over the range of the Age variable, holding all other variables at their means from model labelled U in first table in the Appendix.

⁹ Except when comparing the highest income category to the lowest; this is significant and predicts a lower likelihood of PC crisis for the better off as we would perhaps expect.

- There are **similar effects for age**, with older women significantly predicted to have lower odds of experiencing either type of crisis pregnancy; however the results suggest that there is a **slight curvilinear relationship** here. In other words, the probability of experiencing either of these types of crisis decline with age but with a slight uptick in probability as women reach the upper end of the age distribution for the sample (max. age: 40 years). This effect is substantively rather small, though statistically significant nonetheless.
- **Number of children living in the household was positively correlated**: a larger number of children predicted a higher likelihood of experiencing either type of crisis pregnancy, though the magnitude of the effect was somewhat greater for PC crisis over GC crisis.
- **Poor health proved a significant predictor** and the effect was greater in predicting a pregnancy-specific (PC) crisis. Those women reporting their health as 'poor' or 'fair' had odds of experiencing a Generalised Crisis 46.5% higher than for otherwise healthy women, controlling for other determinants. Meanwhile those reporting poor or fair health had odds 76.5% higher of experiencing PC.
- Those reporting after pregnancy that they received **enough support and help from friends and family** outside the household were significantly less likely to have experienced a GC. Such external support was not significantly related to PC however.
- **Complications in pregnancy** significantly predicted a higher likelihood of both these types of crisis though there was a stronger effect in predicting Generalised Crisis.
- Women **living rurally** were significantly less likely to experience a GC, but urban/rural distinctions made no difference to the likelihood of experiencing a pregnancy-specific (PC) crisis.

Different types of crisis pregnancy were also seen to be important in predicting other outcomes for parents and infants. It was possible to assess the factors contributing to **depression** in the primary caregiver (PCG). Controlling for a set of possible determinants including the set of controls from previous models, as well as education and crisis pregnancy, the results showed:

- **Both crisis pregnancy indicators were significantly and positively correlated** with higher scores on the index of depression available in the dataset; this index had an empirical range from 0 to 24. Generalised Crisis had a greater effect (+1.7 points on the scale) than Pregnancy Crisis (+1.4 points). Crisis pregnancy of either type predicts undesirable depression outcomes for the PCG.

- The control variables showed higher depression scores predicted for: those in poor health; Solo parents; Unmarried-cohabitant parents; those relatively worse off economically; those with a relatively poorer education; younger women; those who feel they do not get enough help or support from outside the home.

The data also allow us to consider how experience of crisis pregnancy later impacts on mother-child relationships. One such indicator is the **level of affection** parents have felt for their 9-month old infants in the preceding two weeks. Fully 95% of mothers reported feeling 'intense affection'. However, 5% of mothers reported feeling less than intense affection, whether that was merely moderate or slight affection, no strong feelings or outright dislike. The results modelling the likelihood of feeling less than intense affection towards one's child showed:

- **Solo mothers** had odds about 30-40% higher of feeling **less affection** towards their child than Married parents. There was **no significant difference for Unmarried-cohabitant parents**.
- Crisis pregnancy indicators were not significantly associated with affection felt towards one's child.

Looking to the child's **weight at birth**, crisis pregnancy was not seen to be significantly correlated with either a higher or lower birth weight, controlling for other factors including whether the mother smoked or drank alcohol during pregnancy.¹⁰ Results showed:

- Crisis pregnancy did not significantly predict birth weight.
- Marital status did not significantly predict birth weight.
- Those who **drank while pregnant** actually had a higher predicted birth weight for their child than those who did not, though this effect was substantively very small.
- **Smoking while pregnant predicted a lower birth weight** as we might expect; 208 grams lower precisely, controlling for other determinants.
- Weight at birth was higher for those who were **better off economically**.
- On a related issue, using **crisis pregnancy as a predictor of the likelihood of drinking while pregnant** it was seen that Generalised Crisis predicted **significantly higher odds** of engaging in this practice.

¹⁰ Controls were all of the factors included when modelling the determinants of crisis pregnancy, as well as two new indicators for consumption of alcohol and tobacco (smoking) during pregnancy.

The data also allow us to look at the specific situation of Solo parents, or those who are not residing at present with the biological father of their child, who number about 1,000 respondents in the GUI dataset. We will consider the effect of crisis pregnancy on frequency of father's contact with mother and baby in a later section dealing specifically with the issue of father's contact.

Summary

Utilising indicators of both intentions and stress concerning pregnancy it was possible to assess the factors associated with two types of '**Difficult pregnancy**', labelled 'Unintended' pregnancy and 'Stressful' pregnancy:

- Unmarried-cohabitant parents are significantly more likely than Married parents to experience either Unintended or Stressful pregnancy.
- Solo parents are more likely than Marrieds to experience Unintended pregnancy, but there is no significant difference as regards experiencing Stressful pregnancy.
- Age matters, with older women seemingly less likely to experience either Unintended or Stressful pregnancy, however likelihood of experiencing either type seems to be greatest at either end of the age spectrum, declining in the middle before rising again.
- A higher number of children in the household as well as poor health and being a non-native English speaker were all factors predicting a higher likelihood of reporting crisis pregnancy (though see the chapter itself for details).
- Getting enough help or support around the home in the months after birth was not significantly related to either type of difficult pregnancy, nor was having a family history of poverty or working part-time before pregnancy.
- Complications in pregnancy predicted a much higher likelihood of having experienced a Stressful pregnancy.
- Rural-dwelling women were slightly less likely to experience Unintended pregnancy.

Combining indicators of intention and stress around pregnancy it was possible to define two types of '**Crisis pregnancy**', where pregnancy was *both* unintended and stressful at the same time. The broader and more general type where stress was due to any reason whatsoever was labelled 'Generalised crisis' while the instance where the stress experienced was attributable *solely* to the pregnancy itself was labelled 'Pregnancy crisis':

- In either case marital status matters, and Unmarried-cohabitant parents and Solo parents are more likely than Married parents to experience crisis pregnancy.
- In the case of Generalised Crisis, economic differences do seem to matter, with the better off increasingly less likely to experience this type of crisis.
- For Pregnancy Crisis there are few significant differences by household income quintile.
- The age effects are similar to those for difficult pregnancy.
- Number of children living in the household, poor health and complications in pregnancy all predicted a higher likelihood of experiencing crisis pregnancy.
- Those reporting after pregnancy that they received enough support and help from friends and family outside the household were significantly less likely to have experienced a GC crisis. Such external support did not help to predict PC crisis however, indicating that this affects women regardless of the level of external support available to them.
- Women living rurally were significantly less likely to experience a GC crisis, but urban/rural distinctions made no difference to the likelihood of experiencing a PC crisis.

Using the crisis pregnancy indicators it was possible to test the **effects of crisis pregnancy on outcomes:**

- Both crisis pregnancy indicators were significantly and positively correlated with higher scores on the index of depression available in the dataset.
- Crisis pregnancy indicators were not significantly associated with affection felt towards one's child.
- Crisis pregnancy did not significantly predict birth weight.
- Using crisis pregnancy as a predictor of the likelihood of drinking while pregnant it was seen that Generalised Crisis predicted significantly higher odds of engaging in this practice.

3. Unmarried-cohabitant and Solo Parents: Life and Lifestyle

3.1. Health

Here we consider the health of both mother and baby. At the most general level, fully 70% of the sample of parents reported that their health was either excellent or very good. There was a significant association by marital status however, with Married parents significantly more likely to report very good health outcomes, and with progressively worse outcomes significantly more likely to be reported as one moves away from marriage through unmarried cohabitation to solo parenthood. The table below shows frequencies of reported health by status.

Table 5 - Current health by Marital status

J1. In general, how would you say your current health is?	Marital Status			Total
	Married	Unmarried	Solo	
Excellent	33.08	25.68	23.19	30.58
Very good	39.82	41.14	36.40	39.65
Good	21.32	25.63	30.59	23.19
Fair	5.18	6.61	8.16	5.79
Poor	0.60	0.95	1.66	0.79
Total	100.00	100.00	100.00	100.00

Pearson $\chi^2(8) = 145.1742$ Pr = 0.000

Ordinal logistic regression models also show a significantly higher likelihood of being in a **worse health category** for Unmarried-cohabitants and for Solo parents compared to Marrieds, even controlling for income. There were no differences by marital status in propensity of experiencing a **chronic health problem** when controlling for income.¹¹

There were some interesting differences in health-related practices however:

¹¹ However, at the 10% significance level Solo parents had odds 26% higher than Marrieds of having a chronic health problem. There were no significant differences across marital statuses in any chronic health problems reported as arising *since baby was born*.

- Unmarried-cohabitant parents were over 2.5 times more likely to **smoke** 'daily or occasionally' than Married parents, even controlling for the effects of both income and education;
 - Solo parents were almost 4 times more likely to do so than Marrieds.
- **Alcohol consumption** patterns may run in something of the opposite direction however (Fig. 1). About one in three Married parents report drinking 1-2 times a week or more, with a smaller proportion of Unmarried-cohabitants drinking similarly, and only one in five Solo parents reporting similar patterns.
- About half of Solo parents report drinking never or less than once per month. Solo parents are 1.5 times more likely than Marrieds to be in this category of those drinking very rarely, and Unmarried-cohabitants are slightly more likely to be in this category (no control variables).
 - Controlling for education, the significant effect for Unmarried-cohabitants disappears, though Solo parents still have odds significantly higher, by 20%, of being in this category. There is no significant effect however when controlling for income, suggesting that frequency of drinking is explained by amount of (disposable) income available.

When looking at behaviours during pregnancy, specifically the likelihood of **drinking while pregnant**:

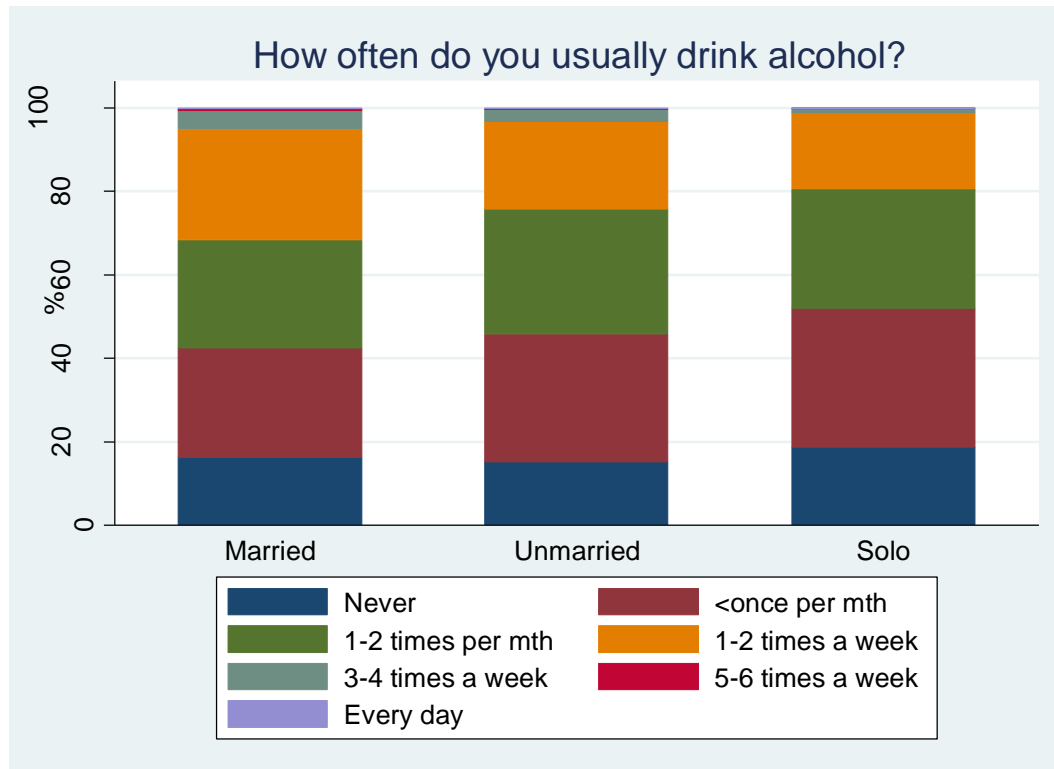
- Solo parents were significantly more likely to do so than Marrieds, controlling for income and education.
- There was no significant difference for Unmarried-cohabitants.

Significant differences were detected concerning those who **smoked during pregnancy**:

- Unmarried-cohabitant parents were almost 3 times more likely than Marrieds to have smoked while pregnant, controlling for income and education;
- Solo parents were almost 4 times more likely to have done so.¹²

¹² Odds ratio of 2.79 for Unmarried-cohabitants, 3.81 for Solos; reference category was Marrieds.

Fig. 1



Given this finding we may expect to find some patterning of the baby's health outcomes by marital status. Baby's **current health** as reported by the primary caregiver did differ significantly by marital status in a limited instance; parents were asked whether their child was 'very healthy' with no problems, 'healthy' but with a few minor problems, 'sometimes quite ill', or 'almost always unwell':

- **Solo** parents were 3.3 times more likely to report baby as being 'almost always unwell', controlling for a likely set of determinants of baby's health, namely household income, mother's education level, whether the mother smoked or drank alcohol during pregnancy, and whether there were complications during the pregnancy.
 - Those who **smoked** while pregnant were almost 3.5 times more likely to report that their baby's current health was 'almost always unwell'.
- However this difference by marital status disappeared once the effect of crisis pregnancy was known. Those women who experienced a **Generalised Crisis** were 6.5 times more likely to report their baby as being currently 'almost always unwell'.

The analysis showed that there were no significant differences in baby's **health-at-birth** across marital statuses when controlling for likely determinants.¹³ However, all marital status groups were equally likely to have brought their infant for a **checkup at six weeks** old and all were equally likely

¹³ The same set as used for 'baby's current health'.

to have had **vaccinations administered at 2 months old**. There were some differences for **vaccinations at 4 and 6 months** old however. These results on vaccinations and check-ups controlled for likely determinants including: education, income, the presence of a chronic disability, mother's age, region of the country, whether English is the mother's native language, whether mother drank or smoked while pregnant, whether there were complications in pregnancy, number of children in the household, whether the mother is from a family with a history of poverty and whether the mother worked part-time before birth.

- Unmarried-cohabitant parents had odds 35% lower than Married parents of having had their child's vaccines administered at **4 months**; there was no significant difference for Solo parents compared to Married parents.
- The same result held true for Unmarried-cohabitant parents and **vaccines at 6 months**; their odds were 35% lower of having had them administered than Married parents. This result was also true of Solo parents for vaccines at 6 months (35% lower odds than Marrieds).

Interestingly, the experience of crisis pregnancy was seen to impact in a highly significant manner on these baby-related health outcomes. Definitions of the various types of crisis pregnancy explored here is given in the previous section in detail. Using the same set of controls plus this crisis indicator, the experience of Pregnancy Crisis significantly predicted much lower odds of following up on the baby's vaccination regime. For those who had experienced Pregnancy Crisis compared to those who had not:

- Odds were over 74% lower for having vaccinations at 2 months;
- Odds were 57% lower for having vaccinations at 4 months;
- Odds were 35% lower for vaccinations at 6 months.

Finally, Unmarried-cohabitants are twice as likely to be on any type of **medical card**, and Solo parents are 7 times more likely, compared to Married parents; also, the odds of an Unmarried-cohabitant parent having access to **private health insurance** are 65% lower than for Married parents, while the same odds for Solo parents are 83% lower than Marrieds (controlling for income, education, presence of a chronic disability and history of poverty in each instance).

Looking at how many weeks when mothers **first became aware they were pregnant**, there were also statistically significant differences observed¹⁴:

- **Unmarried-cohabitant** parents showed no significant difference in comparison to Married parents;
- **Solo** parents were 1.75 times as likely to become aware of their pregnancy at a **later** stage than Married parents.¹⁵

Looking at how many weeks when mothers went for their **first antenatal appointment** with their GP or a hospital, controlling for the same factors as for the model of weeks when mother became aware of pregnancy:

- **Unmarried-cohabitant** parents were significantly more likely (1.38 times) to go for their first antenatal appointment at a later stage than Married parents;
- **Solo** parents were almost twice as likely to go for their first antenatal appointment at a later stage than Married parents.

Looking at whether or not there were **complications giving birth**, there were no statistically significant differences across marital type controlling for the same set of factors as in the last two models. Some interesting results include:

- Those with **chronic disability** had odds 57% higher of complications than those without
- A higher **number of children in the mother's household** predicted a significantly lower chance of experiencing complications
- Mothers who **worked full time before birth** had odds 33% higher of complications.

Controlling for income and education there were significant differences in **breastfeeding** habits by marital status.

- **Unmarried-cohabitant** parents had odds 37% lower of breastfeeding at 9 months compared to Married parents;
- **Solo** parents had odds 50% lower than Married parents;

¹⁴ Controlling for income, education, disability, drinking/smoking while pregnant, number of children in household, age, history of poverty, whether mother worked full-time before birth, whether English is mother's native language, region of the country.

¹⁵ Note: it was not possible in the statistical models to return results specifying the precise difference in 'number of weeks' between different marital status categories due to the way the data was coded by the Growing Up in Ireland team at time of data collection.

- Those in higher income quintiles were significantly less likely than the less well-off to still be breastfeeding at 9 months, with the wealthiest having odds 58% lower than the poorest of doing so.
- For the entire sample, 60% of women answered Yes when asked if their baby had ever been breastfed.

Summary

- Unmarried-cohabitant and Solo parents tend to have worse health practices and worse behaviours during pregnancy. Incidence of smoking generally and during pregnancy is higher than for Married parents. However, Married parents have a tendency to drink alcohol more often, though not during pregnancy.
- Health outcomes (being 'almost always unwell') were worse for the children of Solo parents and also for the children of smokers.
- Unmarried-cohabitant and Solo parents were less likely to have had their child's vaccines administered in the later stages (4 or 6 months) of the child's development, but there were no differences for early vaccinations (at 2 months).
- Solo parents were likely to discover they were pregnant at a later stage than other parents.
- Unmarried-cohabitant and Solo parents were more likely than Married parents to wait longer before their first antenatal appointment and were less likely to be breastfeeding their children at 9 months.
- Crisis pregnancy, variously defined, was seen to be a significant predictor of undesirable health outcomes for infants and lower odds of parents having had their child vaccinated.

3.2. Welfare

Use of the welfare system is another area of interest. There was a pattern to usage of the welfare system: 84% of Marrieds reported that no one in their household was in receipt of social welfare payments (excluding universal payments), while the figure for Unmarried-cohabitants was 70% and for Solo parents it was 59%. Testing for significance:

- Unmarried-cohabitants were almost twice as likely as Marrieds to live in a household where anyone was receiving any form of social welfare payment (not counting universal entitlements), while Solo parents were two and a half times more likely.¹⁶

Almost three out of every ten Solo parents (27.7%) were claiming the One-Parent Family Payment, though it should be noted just under 60% of Solo parents reported that their household did not receive any social welfare payments whatsoever, with the exception of the early childcare supplement.¹⁷ A later section will show that 30% of Solo parents were working at the time they were interviewed. In general, almost 60% of Solo parents were in the lowest income quintile - compare that to 26% of Unmarried-cohabitants and 14% of Married parents - and half of these were entirely welfare dependent.

The use of welfare benefits, expressed as a proportion of the total number of welfare payments being received per marital status group, is presented in Fig. 2.¹⁸ Significant differences worth noting include (controlling for education):

- Unmarried-cohabitants are almost twice as likely as Marrieds to be on **Jobseeker's Allowance** and about 1.6 times more likely to be on **Jobseeker's Benefit**;
- Solo parents are only about half as likely as Marrieds to be on either **Jobseeker's Allowance** or **Jobseeker's benefit**;
- Unmarried-cohabitants are 2.5 times more likely than Marrieds to be on **rent supplement**;
- Solo parents are 9 times more likely to be on **rent supplement**.

Looking at welfare dependency, where 100% of the household's income is derived solely from state-provided welfare benefits, we see that (controlling for education, number of children in household,

¹⁶ Controlling for education.

¹⁷ 89-90% of parents across all marital statuses were in receipt of the early child-care supplement.

¹⁸ 17 different types of social welfare payment, where payments were not actually recorded for the sample or where only a handful of people were claiming that payment, were collapsed into the 'Others' category. Graph only shows those actually in receipt of social welfare payments.

chronic disability, age, and whether the respondent reported that her family home had difficulty making ends meet when she was 16):

- Unmarried-cohabitants are 2.34 times more likely than Marrieds to be welfare dependent;
- Solo parents are 10.2 times more likely to be so;
- Interestingly, those with a family history of poverty were no more likely to be welfare dependent than those without;
- Older women were less likely to be welfare dependent;
- Those with chronic disability ($p < .10$) and larger families were more likely to be welfare dependent.

Deprivation was also more marked among non-married parents. Unmarried-cohabitant parents were significantly less likely than Married parents to:

- Have friends around to their home;
- Be able to keep their home adequately warm;
- Possess a warm coat;
- Have a roast joint or equivalent at least once a week.

Solo parents fare worse on every measure of deprivation, being at least **half as likely as Married parents to enjoy the above lifestyle staples**, and also being deprived on other indicators including:

- eating nutritious meals at least every second day;
- being able to buy new as opposed to second-hand clothes;
- being able to replace worn-out furniture;
- being able to buy presents for family members at least once a year; etc.

Summary

- Unmarried-cohabitant parents are more likely to be on unemployment benefit and on rent supplement than Married parent; they are more likely to be welfare dependent and to live in a household which is in receipt of at least one type of welfare payment; they are also more likely to experience certain types of material deprivation
- Solo parents are 10 times more likely to be welfare dependent, 9 times more likely to be on rent supplement, much more likely to experience all types of material deprivation measured in the GUI data, and half as likely as Married parents to be on unemployment benefit.

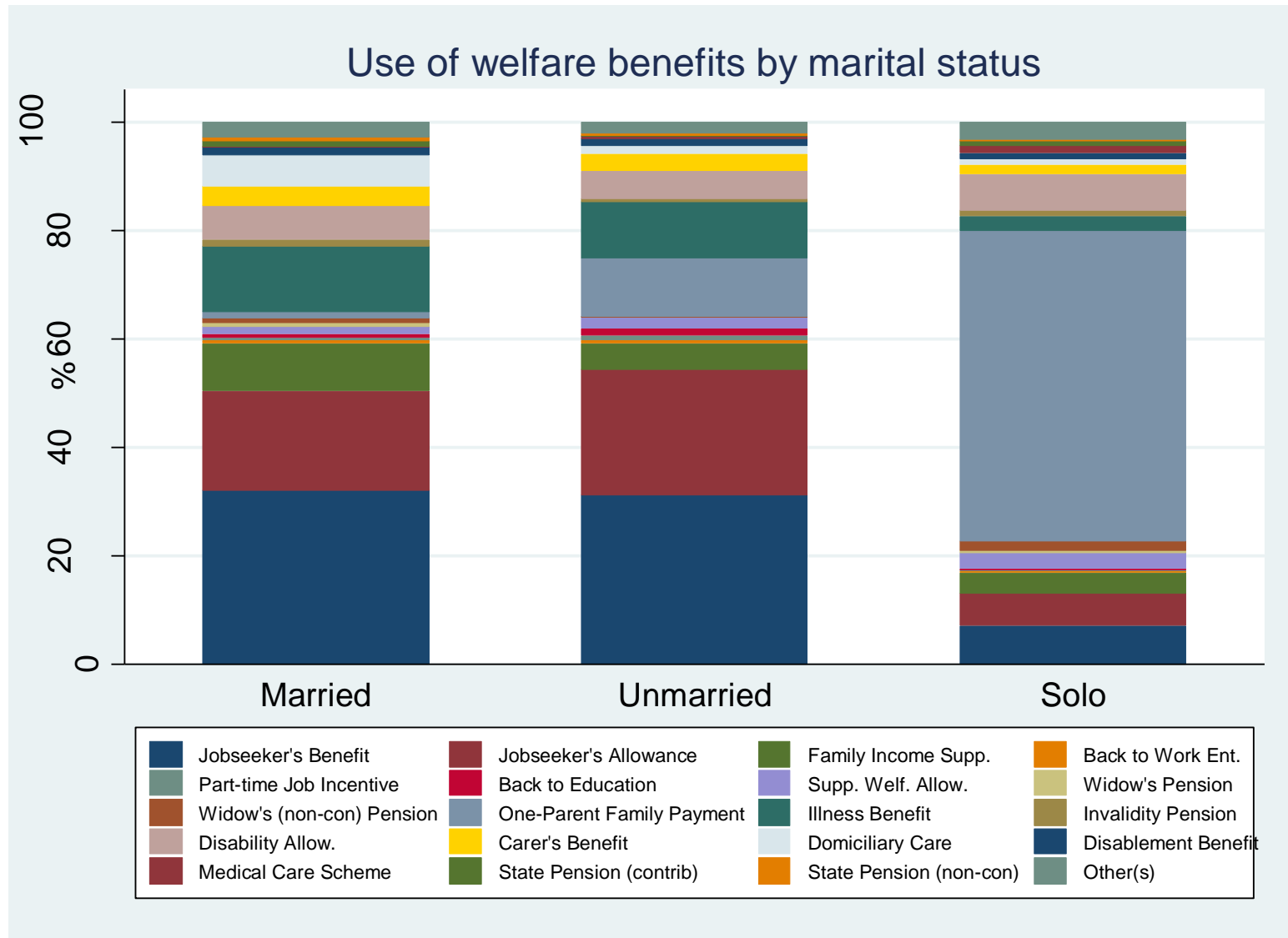


Fig. 2

3.3. Childcare

Here we explore childcare arrangements and assess significant differences by marital status. Most parents surveyed were taking care of their own child, with no one else helping to take care of their baby on a regular basis each week: 60% of the sample reported that no one else was regularly taking care of their child. Of the remaining 40% (N=4420) there were significant differences in the type of childcare arrangement women relied on; all significant differences reported control for income unless otherwise noted.

- Solo parents were significantly more likely to have a **relative mind their child in their own home** than either of the other two marital status groups, with the child's grandmother being by far the most frequently involved relative (Fig. 3).¹⁹
- Solo and Unmarried-cohabitant parents were significantly more likely to **have their child minded by a relative** compared to Married parents.
- Controlling for no other factors, Solo parents were about half as likely as Married parents to use a **childcare centre like a crèche**.
 - However, when controlling for the effects of income Solo parents are actually significantly *more* likely than Marrieds to use centre-based childcare. This highlights the **importance of financial constraint for Solo parents** in making childcare arrangements.

This finding is borne out in the next figure (Fig. 4) which shows a larger proportion of Solo parents choosing their main form of childcare on the basis that it was the only one they could afford; they also register a slightly larger proportion comparatively reporting that it was the only one available to them.

- Solo respondents were more than 3.5 times more likely than Married parents to report that their childcare decisions were **determined by financial constraints** 'completely or to a large degree', and this finding was significant controlling for income.
- Unmarried-cohabitant parents were also **significantly more likely than Marrieds to report such financial constraint**. However, as can be seen in Fig. 4, the quality of care provided is overwhelmingly the most important reason cited in choosing the main type of childcare across all marital status groups.

¹⁹ 76% of all those reporting a relative's involvement reported that this person was the child's grandmother.

Fig. 3

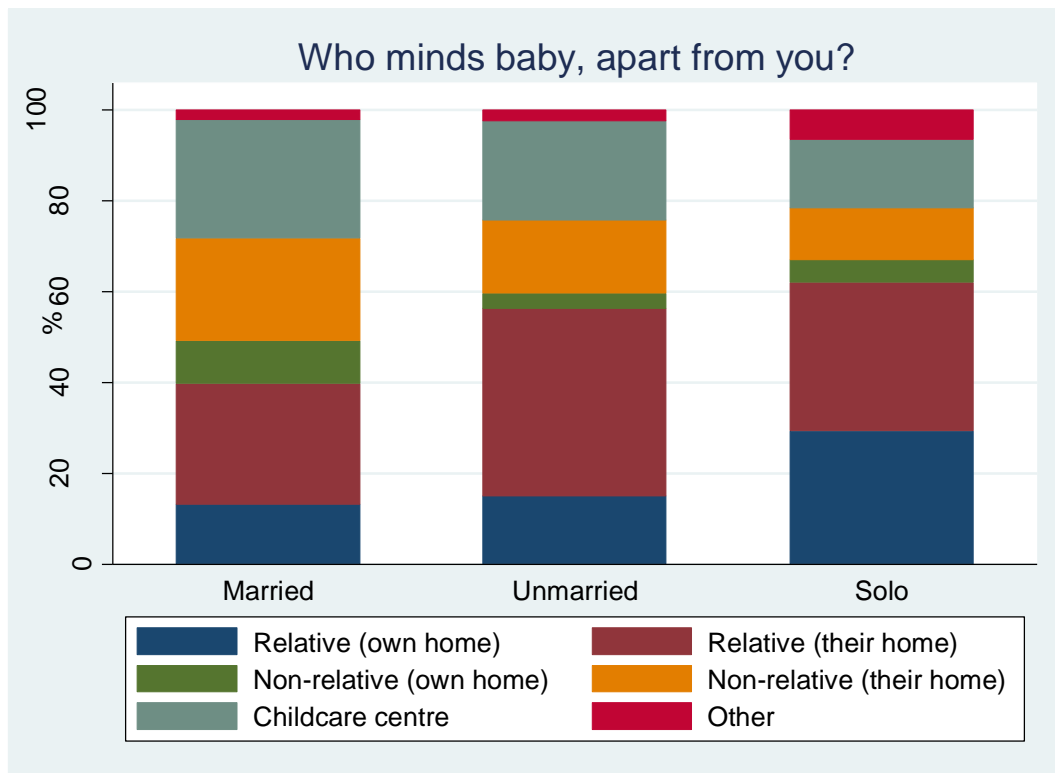
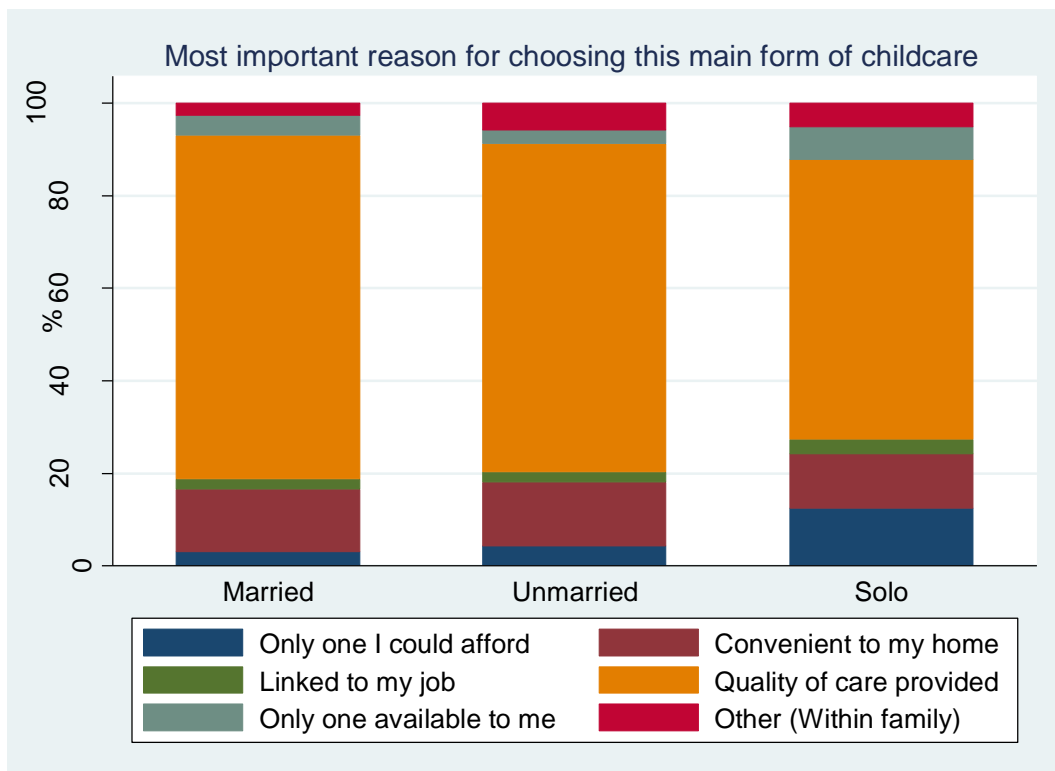


Fig. 4



Constraints on whether and how families can make childcare arrangements impact in different ways on different family types as distinguished by marital status. Fig. 5 clearly demonstrates this: for Married parents the prevention of social activities was reported most frequently as a deleterious impact on lifestyle where childcare has been difficult to arrange. Almost 45% of the responses from Married parents reporting negative impacts reported this as an issue. This compares with less than 30% of responses from Solo parents reporting negative impacts due to difficulties arranging childcare. Testing this formally and controlling for income:

- There were **significant differences** in the likelihood of reporting a prevention of social activities due to childcare constraints when **comparing Solo parents to Married** and to Unmarried-cohabitants, **but not when comparing Unmarried-cohabitants to Married** parents.
 - It should be noted that over half the sample of all parents did not report any negative impacts due to difficulties arranging childcare; 55% of Marrieds, 52% of Unmarried-cohabitants, and 44% of Solos reported 'no difficulties'.
- A greater proportion of responses from Solo parents compared to other marital status types reported childcare difficulties **preventing their looking for a job or preventing them from taking study or training**; these were significant differences for **Solo parents**.
 - There were no significant differences in these outcomes between Unmarried-cohabitant and Married parents.
- Solo parents were also significantly more likely to have been made to **leave study/training** due to difficulty in arranging childcare compared to other family types.
 - There was no significant difference between Marrieds and Unmarried-cohabitants on this.

It is also possible to assess how intentions towards future childcare arrangements differ by marital status. Fig. 6 shows clearly that Solo parents respond with the greatest frequency indicating part-time childcare will be their intended arrangement, and they are significantly more likely to intend on this arrangement than Marrieds and Unmarried-cohabitant parents.

- Married parents are significantly more likely than other groups to report that they intend to still be **caring for their child full-time at three years old**.
- Unmarried-cohabitant parents may appear to report with higher frequency intentions to share childcare duties with their partner, but this difference is not significant controlling for income.

Fig. 5

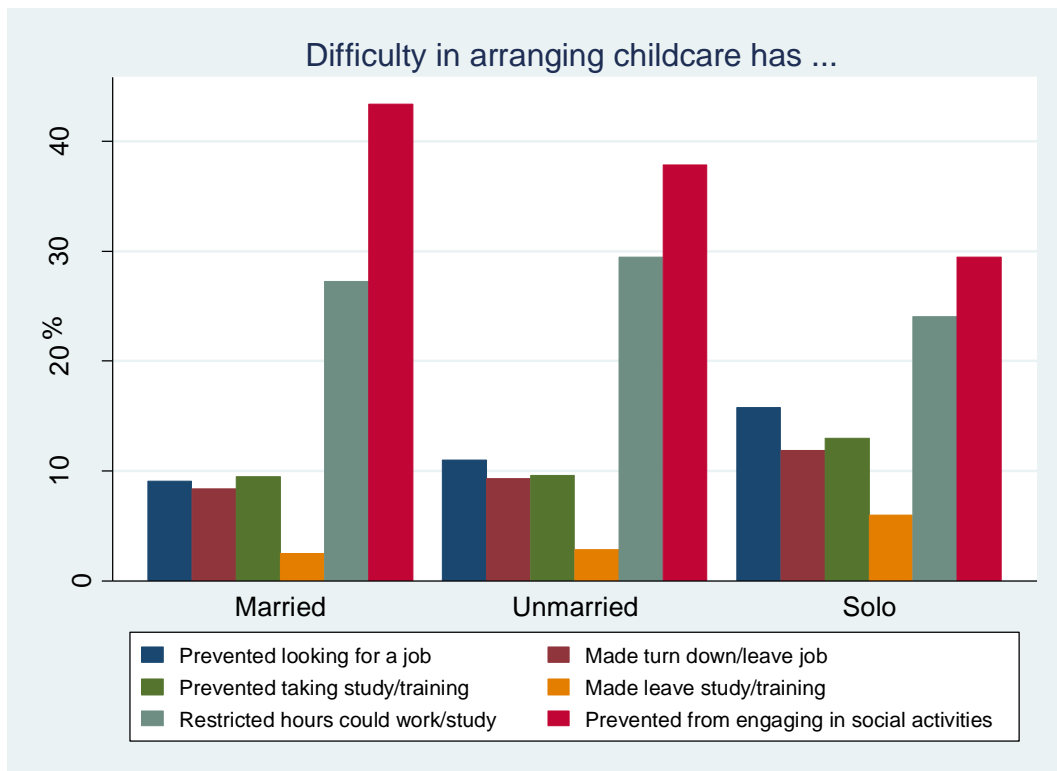
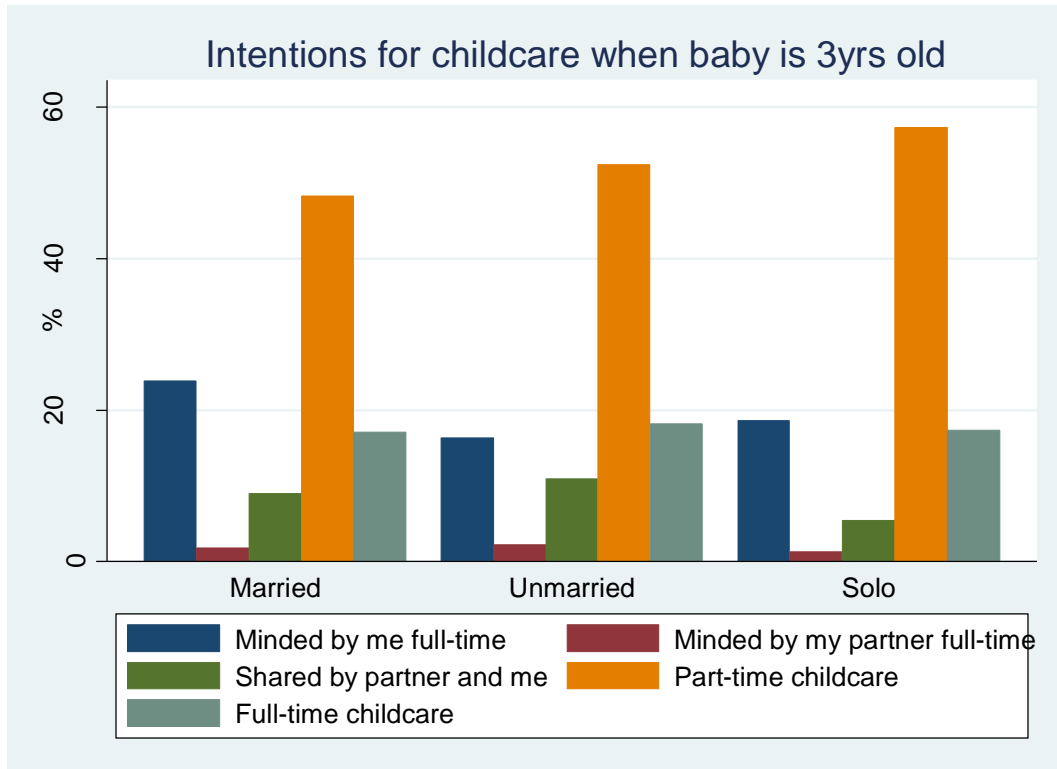


Fig. 6



NB: graphs for Figs. 5 and 6 show proportions for total number of responses, not total number of individuals responding. Individuals are not necessarily coterminous with responses, though most people ticked only one box.

The role of external support and grandparents is also important in childcare, both freeing up time for the mother to potentially enter the labour market and also entailing potential cognitive benefits for the poorest children (Baydar and Brooks-Gunn 1991). Controlling for income and looking at **general external support**:

- Unmarried-cohabitant and Solo parents were both significantly more likely than Married parents to report feeling that they get **enough help from outside the home**.
- Controlling for **crisis pregnancy** however, namely Generalised Crisis (see previous section²⁰), it was seen that those who experienced this type of crisis were significantly **less likely to report that they got enough help**.

On **frequent babysitting by grandparents**, where frequent is defined as at least once a week or almost every day, we find²¹:

- No significant difference for Unmarried-cohabitant parents, while Solo parents are 1.5 times more likely to have frequent grandparental babysitting.
- Crisis pregnancy (either GC or PC types) did not impact on this outcome.
- Older women, non-native English speakers, and those with more children were significantly less likely to have recourse to frequent grandparental babysitting.
- Those who worked full time before birth were significantly more likely to have recourse to frequent grandparental babysitting.

On **helping round the house by grandparents**, controlling for the same set of factors as in the last model on frequent grandparental babysitting:

- Unmarried-cohabitant parents were significantly less likely than Married parents (odds 17% lower) to report grandparents helping round the house.
- Solo parents were 1.75 times more likely to have grandparents help around the house.
- Older women and those whose native language was not English were significantly less likely to have grandparents helping around the house.

On **grandparents helping financially**, controlling for the same set of factors as in the last model:

²⁰ Briefly, this is similar to Pregnancy Crisis except that it is defined to take account of other non-pregnancy-specific stressors as the source of stress throughout pregnancy.

²¹ Controlling for income, number of children in household, age of mother, whether mother worked full-time before birth, whether English is mother's native language, presence of a chronic disability.

- Unmarried-cohabitant parents were (1.5 times) more likely to receive financial help with higher frequency than Married parents.
- Solo parents were over twice as likely (2.2 x) to receive financial help with higher frequency than Married parents.
- Younger women, those with a chronic disability, those with fewer children, and non-native English speakers were all significantly more likely to receive financial help with higher frequency from grandparents than those without these attributes.
- Crisis pregnancy (either GC or PC types) did not impact on this outcome.

Summary

- Unmarried-cohabitant and Solo parents were more reliant on their relatives for help with childcare; Solo parents were more reliant on grandparents for babysitting, and helping round the house.
- Both Unmarried-cohabitant and Solo parents were more likely to receive financial help from grandparents with higher frequency than Married parents.
- Financial constraint was an important determinative factor in choice of childcare arrangements for both Unmarried-cohabitant and Solo parents, more so than for Married parents.
- Childcare difficulties made it significantly more difficult for Solo parents to look for work or engage in study in comparison to Married parents, and also made it more likely that Solo parents had to leave study/training they were already engaged in.
- Married parents were significantly more likely to report that childcare had prevented social activities than other marital status types.
- Unmarried-cohabitant and Solo parents were more likely to report that they got enough external help.
- Those who experienced crisis pregnancy were less likely to report that they received enough external help and support.

3.4. Work

Looking to the work habits of women in our sample, we see that 77% were engaged in work either full-time or part-time when they became pregnant. A greater proportion of Unmarried-cohabitant parents worked full time (60%) compared to Marrieds (56.8%) while only 39% of Solo parents were working full-time when they became pregnant.

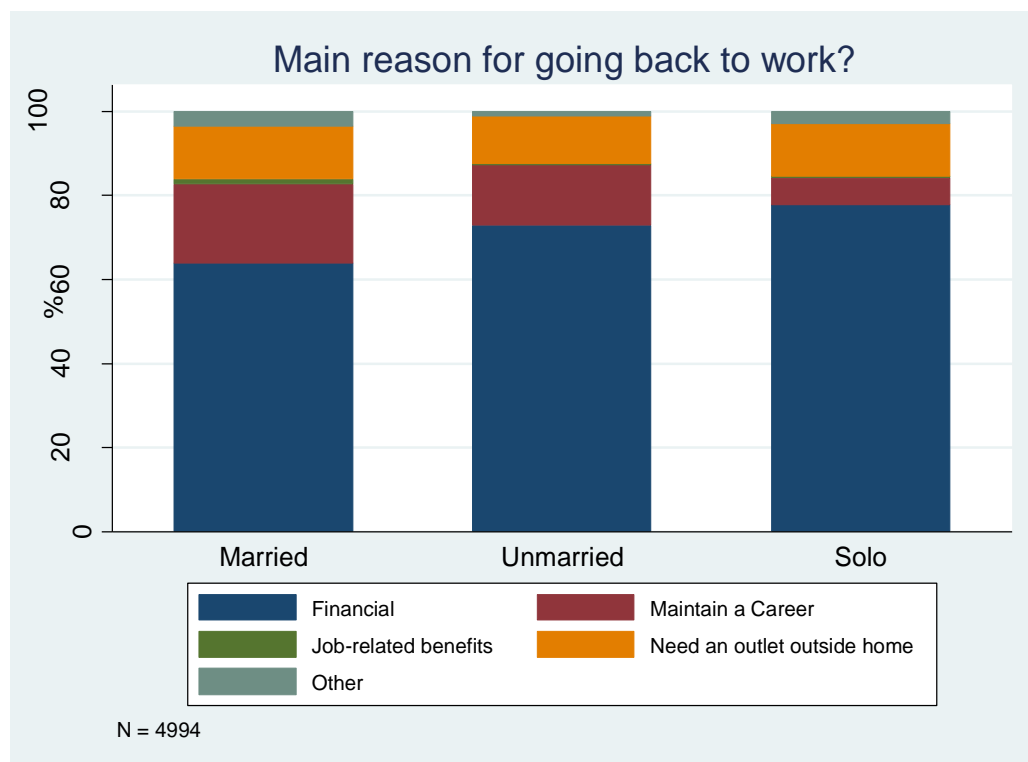
Table 6 - Pre-birth working practices by Marital status

K5. Did you work before you became pregnant with baby?	Marital Status			Total
	Married	Unmarried	Solo	
Full-time	56.81	60.44	39.23	55.37
Part-time	21.67	20.68	25.09	21.90
Not at all	21.52	18.88	35.68	22.73
Total	100.00	100.00	100.00	100.00

Pearson $\chi^2(4) = 197.7296$ Pr = 0.000

At time of interview, when baby was 9 months old, the majority of women, 58% (N=4996), had returned to work outside the home either full- or part-time; 42% had not returned to work. 62% of Marrieds, 58% of Unmarrieds and 30% of Solos were 'at work' at time of interview (employed/self-employed; this includes those on maternity leave from a job they intend to return to).

Fig. 7



The main reason for women returning to work was overwhelmingly financial and this was more important for a greater proportion of Unmarried-cohabitants than Marrieds, and for a greater proportion of Solo parents than either of the other two groups, both significant (Fig. 7).

- Solo parents were significantly less likely to cite 'maintain a career' as a reason for returning to work compared to Marrieds, controlling for education level; Unmarried-cohabitants were not significantly different to Marrieds.

There were significant differences in work practices as related to pregnancy across marital status.

- **Married parents worked longer into pregnancy** than Unmarried-cohabitant parents and Solo parents. All ceased work around 4 weeks before birth, but Marrieds ceased on average 3.7 weeks before birth, Unmarried-cohabitants 4 weeks before birth, and Solos 4.25 weeks before birth, with these differences being significant (no controls).
- These significant differences disappear once we control for other important factors which themselves had significant predicted effects:
 - The better-off, older women, and those who were not native English speakers worked longer into pregnancy.
 - Those with a chronic disability finished work before giving birth sooner than those without a disability.
- **Unmarried-cohabitant parents returned sooner to work than Married parents**, even controlling for other factors²², and **Solo parents returned soonest of all three groups**, with these differences significant controlling for income.
- No differences were detected between groups in terms of the **hours worked per week** before giving birth, when controlling for education, where the highly educated were seen to be more likely to work fewer hours than the less well-educated.

There were significant differences detected in the likelihood of taking maternity leave and other forms of leave from work after pregnancy (all models control for income and number of children in household²³).

- **Paid Maternity Leave:** The odds of taking paid maternity leave were 28% lower for Unmarried-cohabitants, and 41% lower for Solo parents, compared to Marrieds.²⁴

²² Namely income, age, number of children in household, whether English is native language, chronic disability (non-sig.) and region of country (non-sig.).

²³ Other control variables including age, native language, disability were tested but proved to have no explanatory power in these models.

²⁴ The model includes only those who were eligible for paid maternity leave, i.e. those who worked before birth; N = 4645.

- **Unpaid Maternity Leave:** Unmarried-cohabitants were also significantly less likely to take unpaid maternity leave, with odds of doing so 22% lower than for Marrieds, while Solo parents were only half as likely as Marrieds to do so.
- **Annual Leave:** Unmarried-cohabitants were less likely to take annual leave (odds 38% lower) than Married parents; Solo parents were also less likely to do so than Marrieds (odds 30% lower).
- **Sick Leave:** There were no significant differences by marital status in terms of propensity to take sick leave following pregnancy.
- There were no significant differences by marital status in the length of time parents took unpaid maternity leave or sick leave.
 - However, Solo parents were more likely to take a shorter period of paid maternity leave than Married parents; there was no significant difference for Unmarried-cohabitant parents.
- Compared to Married parents, both other groups took significantly less annual leave after pregnancy (where they took annual leave at all).

Of those not yet back at work, 71% of those responding indicated an intention to return to work either full-time or part-time, with one in five (20%) not sure at time of interview, and only 8% firmly resolved not to return to work.²⁵ This varied by marital status: 10% of Marrieds, 7% of Unmarried-cohabitants and 5% of Solo parents indicated that they did not intend to return to work.

Of those intending to return to work, 59% cited financial reasons as their most important reason for doing so, 18% cited the desire to maintain a career, and 20% indicated that they needed an outlet outside the home.²⁶ Numbers of respondents (cell sizes) become small at this point so it is difficult to say whether these outcomes vary by marital status, but a greater proportion of Unmarried-cohabitants (65%) cite financial reasons as their motivation to return to work, where they intend to do so, than Solo parents (60%) or Married parents (57.5%). These differences are not significant when controlling for income (N=2131).

- Solo parents intending to return to work were significantly more likely to intend to wait longer than Married parents before returning to work, controlling for income.
- There was no significant difference between Marrieds and Unmarried-cohabitants.

²⁵ Total N for this survey response item is 3592; 19% of Marrieds, 25% of Unmarried-cohabitants and 23% of Solo parents indicated they were 'not sure' if they would return to work.

²⁶ N = 2342.

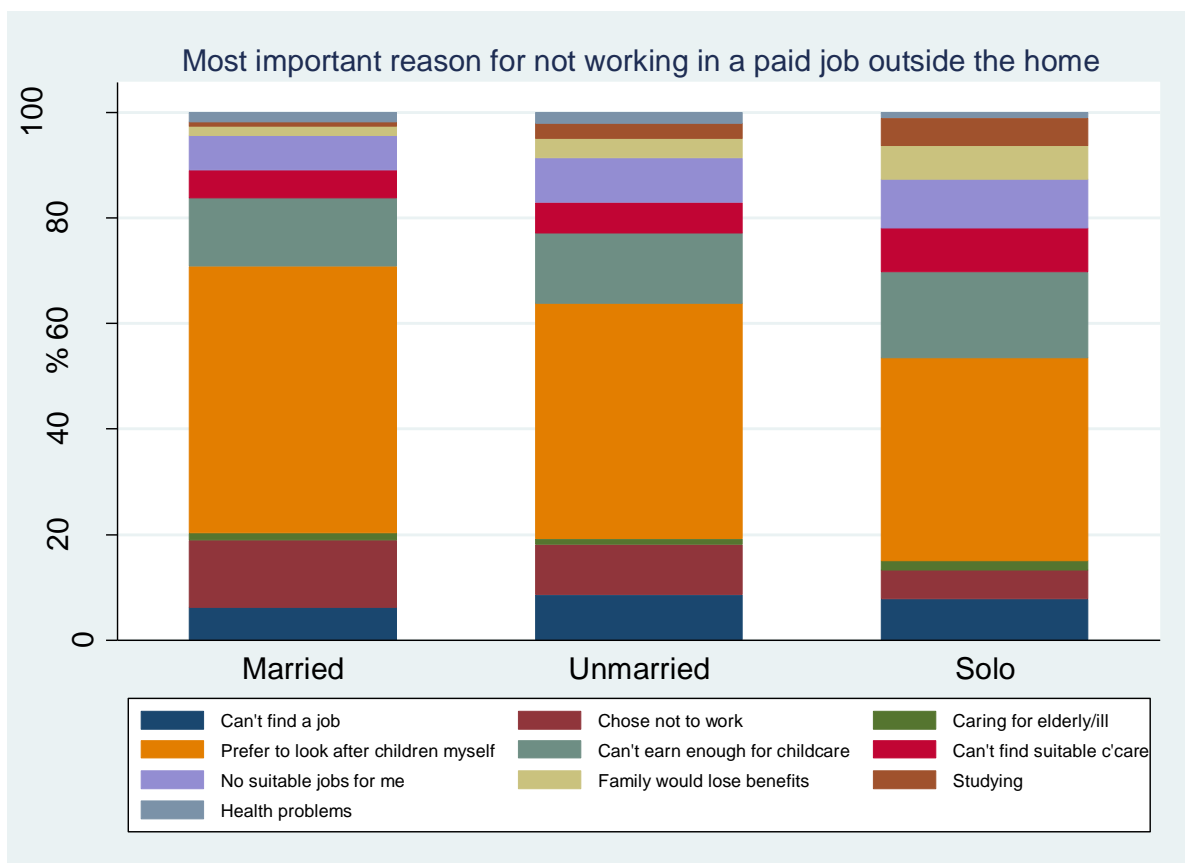
Leaving aside intentions around returning to work after pregnancy, some women have never held a job outside the home and do not intend entering the workforce after having given birth (N=4386). Their main reasons for not doing so are summarised in the figure below (Fig. 8).

- **Married** parents are significantly more likely than either of the other two marital status groups to cite a **preference for staying at home to look after their children** themselves as being the most important reason, controlling for income.

Another important reason concerned the **inability to earn enough to pay for childcare**.

- **Solo parents** were significantly more likely than Married parents (1.7 times more likely) and Unmarried-cohabitant parents (1.7 times more likely) to cite this as the **most important reason** for their not working outside the home, controlling for education.
- There was no significant difference in this likelihood between Unmarried-cohabitant and Married parents.

Fig. 8²⁷



²⁷ N for this figure is about 4400.

Looking now to the experience of work there were other significant differences to note:

- **Hours worked:** This model constrained the analysis only to those parents working more than zero hours per week, i.e. actually working. Solo parents were seen to work fewer hours, controlling for income, education, age, disability, native language and number of children in household. There was no significant difference in terms of hours worked comparing Unmarried-cohabitant to Married parents.
- **Economic status:** Unmarried-cohabitants are more likely than Marrieds to define their principal economic status as 'employee', while Solo parents are slightly less likely than Marrieds to do so. This model controls for education, age and whether the respondent is a native English speaker.
- **Part-time work:** Unmarried-cohabitants were nearly twice as likely to hold a part-time job as Married parents ($p=.052$), with there being no significant difference for Solo parents. This controls for education, age, chronic disability, region of the country, number of children in household and whether the mother worked (either full-time or part-time) before she became pregnant.
- **Income:** Unmarried-cohabitants had household income significantly lower on average than that of Married parents, in the order of an estimated €6,176 less. Solo parents' income was estimated to be €21,783 less than Marrieds. These results control for other determinants of earnings, namely education, age, the presence of a chronic disability, and whether the respondent is a native English speaker.

Summary

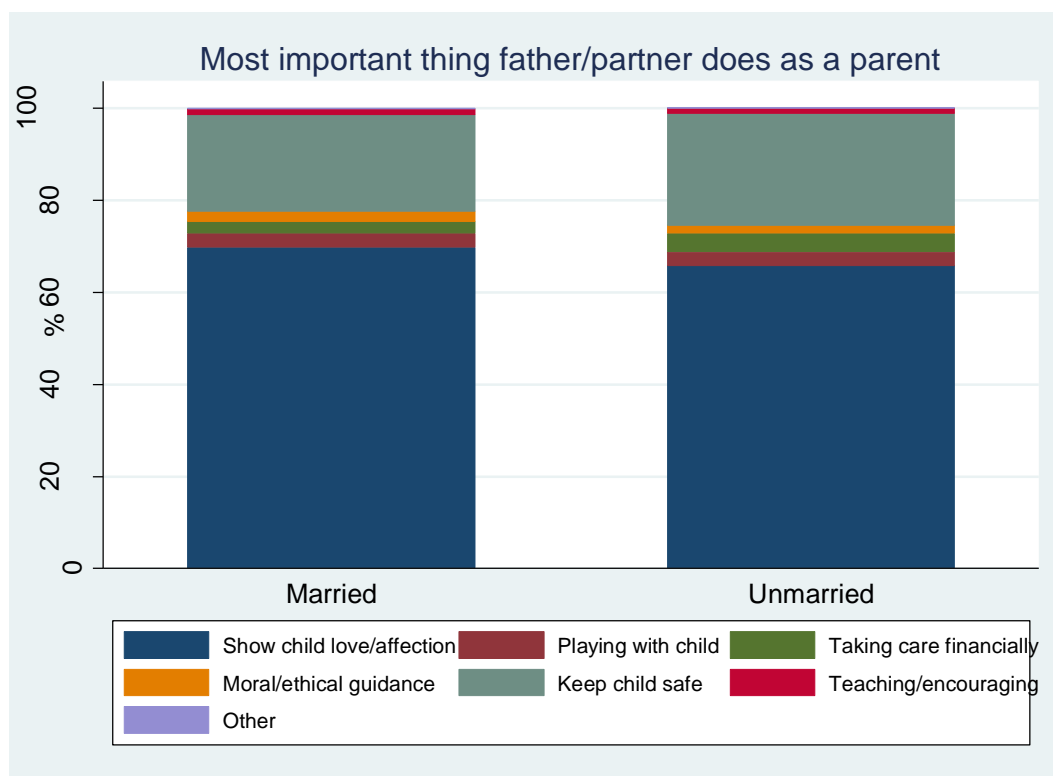
- Married parents worked longer into pregnancy than Unmarried-cohabitant parents and Solo parents. These differences were explicable in terms of socio-demographic factors.
- Unmarried-cohabitant parents returned sooner to work than Married parents, controlling for other factors, and Solo parents returned soonest of all three groups.
- Unmarried-cohabitant and Solo parents were less likely than Married parents to take: paid or unpaid maternity leave, or annual leave.
- 71% of parents not yet back to work indicated an intention to return to work either full-time or part-time. 59% of these parents cited financial reasons as the most important reason for doing so.

- Of those not intending to enter the workforce, having never held a job outside the home, Married parents were significantly more likely to state that they preferred to stay home to mind their children themselves.
- Solo parents were more likely than other marital status groups to cite their inability to pay for childcare as the most important reason for not working outside the home.
- For those who worked, Solo parents worked fewer hours.
- Unmarried-cohabitant parents were twice as likely as Married parents to work part-time .
- Unmarried-cohabitant parents earn less than Married parents and Solo parents earn much less.

4. Fathers

4.1. Married and Unmarried-cohabitant parents

Fig. 9



Note: 'most important' factor ranked as '1' in list of possible factors.

Fig. 9 makes clear that fathers esteem the same things to be most important in their role as parents whether they are married or not. Showing their child love or affection is the most important thing that fathers feel they can do, and this holds true for about 70% of fathers whether married or unmarried-cohabitant. Keeping their child safe was the most important factor for about one fifth of fathers. There were no significant differences across marital status.

It was seen elsewhere in the data that²⁸:

- 94% of Married fathers were present at the birth of their baby compared to 93% of Unmarried-cohabitant fathers; this was not a statistically significant difference.
- Slightly more Married fathers than Unmarried-cohabitant fathers reported that their **baby's sleeping habits was a 'moderate' or 'small' problem** for them, while more

²⁸ These results are chi-square statistical tests from categorical contingency tables.

Unmarried-cohabitant than Married fathers said that this was 'no problem at all'. This was a significant association.

- There were no significant differences across marital status for the very small proportions of fathers (<5%) reporting that their baby's crying was a problem for them.
- There was a significant association between marital status and **general current health as reported by fathers**, such that higher proportions of Married fathers reported being in excellent or very good health while higher proportions of Unmarried-cohabitant fathers reported only good or fair general health.
- There were significant and marked differences in fathers' **smoking habits**, with 41% of Unmarried-cohabitant fathers doing so daily compared to only 18% of Married fathers. Three quarters of Married fathers don't smoke at all, compared to only half of Unmarried-cohabitants.
- Unmarried-cohabitant parents drink **alcohol** less frequently than Married fathers however, and this association was significant.
- A very high proportion of fathers (88%), equal across Married or Unmarried-cohabitant status, reported that they would **not be taking unpaid parental leave** with their child.
- Of those not self-reporting as a full-time employee, self-employed or farmer, a higher proportion of Unmarried-cohabitant fathers (91%) than Married fathers (84%) reported having **previously held a full-time job**, while a greater proportion of Married fathers (16%) than Unmarried-cohabitants (9%) reported never having held such a job. This association was significant.

There are some interesting significant differences in terms of mother/father (primary/secondary caregiver) sharing of parental responsibilities. Fathers were asked whether a list of activities was performed primarily by them or their spouse on a frequency scale from 'always yourself' to 'always my spouse'. The activities included putting the child to bed, dressing the child in the morning, playing with the child etc. Significant differences were detected between Married and Unmarried-cohabitant parents such that Unmarried-cohabitant parents, in most instances, shared these responsibilities of parenting on a more equal basis than Married parents. Excluding those categories where the activity in question was recorded as being performed by 'someone else' (like a nanny) or 'no one', significant associations by marital status were detected:

- **Feeding baby:** The proportion of fathers sharing the work equally was higher for Unmarried-cohabitant fathers (59%) than Married fathers (47%), while Married fathers were more likely to say this was primarily done by their spouse.

- **Showing baby pictures in books:** The proportion of fathers sharing the work equally was higher for Unmarried-cohabitant fathers (61%) than Married fathers (57%), while Married fathers were more likely to say this was primarily done by their spouse.
- **Playing with baby:** The proportion of fathers sharing the work equally was higher for Unmarried-cohabitant fathers (85%) than Married fathers (81%), while Married fathers were more likely to say this was primarily done by their spouse.
- **Going on walks/outings with baby:** The proportion of fathers sharing the work equally was higher for Unmarried-cohabitant fathers (68%) than Married fathers (63%), while Married fathers were more likely to say this was primarily done by their spouse.
- **Changing baby's nappy:** The proportion of fathers sharing the work equally was higher for Unmarried-cohabitant fathers (67%) than Married fathers (62%), while Married fathers were more likely to say this was primarily done by their spouse.
- **Singing to baby:** Here, Married fathers were slightly more likely to sing to their child (45%) than were Unmarried-cohabitant fathers (44%), though Married fathers were also more likely to say that this was done mostly by their spouse (35%) than Unmarried-cohabitants (33%). 11% of Unmarried-cohabitant fathers said that they themselves usually did this with their child compared to 9% of Married fathers.
- **Gets baby up in the morning:** The proportion of fathers sharing the work equally was higher for Unmarried-cohabitant fathers (41%) than Married fathers (39%), while Married fathers were more likely to say this was primarily done by their spouse.
- **Puts baby to bed:** The proportion of fathers sharing the work equally was higher for Unmarried-cohabitant fathers (56%) than Married fathers (52%), while Married fathers were more likely to say this was primarily done by their spouse.
- **Picks baby up when crying:** The proportion of fathers sharing the work equally was higher for Unmarried-cohabitant fathers (83%) than Married fathers (80%), while Married fathers were more likely to say this was primarily done by their spouse.
- **Bathes baby:** The proportion of parents sharing the work equally was higher for Unmarried-cohabitant parents (39%) than Married parents (36%), while Married parents (fathers) were more likely to say this was primarily done by their spouse.
- **Reads stories to baby:** Here, the proportions sharing this responsibility equally was identical across marital status (51%) each, while the proportions responding that this was primarily done by their spouse was greater for Married fathers (40%) than for Unmarried-cohabitants (38%).

4.2. Solo parents: contact with Baby's Father

Of course, another important aspect of father's involvement with baby concerns contact for Solo parents who, by definition, do not cohabit with the father of their child. We have information on about 1,200 Solo parents and their frequency of contact with the baby's father. Just over one quarter (25.9%) of the sample reported having 'no contact' whatsoever with the father. Among this number, almost half (47%) reported that the baby's father lived in another country. One in five Solo parents (20%) having no contact reported that the father lived within a 30 minute drive.

Regarding financial assistance, 50% of fathers (N=653) are reported as making no financial payments whatsoever, while 36% are reported as making a regular payment with the remainder making payments 'as required'. Of those fathers living within a 30 minute drive, 35% provide no financial assistance whatsoever to the maintenance of their child. For fathers living outside the country, 89% make no financial contribution. A quarter (25%) of all fathers living outside the country have at least *some* contact with their child, though only 7% of those fathers had contact on weekly or more regular basis. Those fathers making a 'regular contribution' to the maintenance of their child are much more likely to live close by, with 75% living within a 30 minute drive. Some fathers have a regular shared parenting arrangement with their child's mother, and of these 79% live within a 30 minute drive.

A minority of Solo parents were ever married to (6%) or cohabited with (18%) the father of their child.²⁹ Of these parents, 60% split up before their child was born. At the time the women became pregnant, over half (55%) were involved in a relationship without cohabitation, almost 14% were cohabitating, and 13% of parents had no relationship to the father of their child. A further 10% recorded being 'just friends' with the father at the time they became pregnant.

Childhood living arrangements have been shown to matter for the life course of young adults, with living arrangements after birth to a single mother influencing, for example, the likelihood of high school completion, enrollment in postsecondary education and timing of entry into the labour force (Aquilino 1996). There are numerous indicators which can be taken as indicative of contact with the child's father. Here we focus on: 1) frequency with which the mother talks to the father about their baby; 2) frequency with which the child has contact with its biological father; 3) whether or not the father makes a financial contribution to the mother's household. Here we consider the effects of crisis pregnancy on these outcomes.

²⁹ Four (4) women in the sample reported that they were the adoptive or foster parent of their child.

On the first indicator of father-mother discussions about baby we control for income quintile, age and the distance between father's home and mother's home (about one in five respondents stated that the father lived outside the country); results show³⁰:

- Those women who experienced Generalised Crisis were **significantly more likely to have reduced contact** with the child's father.
- There is no variation in this outcome by income quintile or age.

On the second indicator, of child's contact with the father, with the same controls, results show³¹:

- Those women who experienced Generalised Crisis or Pregnancy Crisis **had significantly reduced likelihoods of father-child contact**. These results were all significant at standard levels (except PC, where $p < .10$).
- There is no variation in this outcome by income quintile or age.

On the third indicator, concerning whether or not the father makes a financial contribution, using the same controls, the results show³²:

- Those women who experienced Pregnancy Crisis were significantly more likely to receive **no financial contribution** from the father ($p < .10$). The odds of these women receiving no paternal financial contribution were 65% higher than for those women who had not experienced a Pregnancy Crisis.
- Compared to fathers who live outside the country, the odds that a father makes no financial contribution are 92% lower if the father lives less than 30 minutes away; 84% lower if the father lives between 30 mins and an hour; 73% lower if the father lives more than an hour away.
- There is no variation in this outcome by income quintile or age.

³⁰ Ordinal logistic model; 6 categories from Every Day to Never.

³¹ Ordinal logistic model; 7 categories from Daily to No Contact.

³² Logistic regression; 'No contribution at all' = 1.

Frequency of contact with father and whether or not the father made no financial contribution were not significantly associated with child health outcomes. There was **no effect** for either of these indicators on:

- baby's health at birth;
- baby's current health;
- experiencing complications in pregnancy;
- primary caregiver's depression outcomes.

However, there was a significant relationship between financial contribution and birth weight:

- Where fathers made no financial contribution this significantly predicted **a lower birth weight**, controlling for other factors.³³

Summary

- Fathers in Unmarried families have poorer general health and smoking habits, though they drink less than fathers in Married families.
- Fathers in Unmarried families were significantly more likely to share parenting duties and engage with their child across a range of indicators of parental involvement than were Married fathers.
- Among Solo parents, one quarter had no contact whatsoever with the father of their child.
- Among Solo parents, 50% of children's fathers made no financial contribution to maintenance.
- Less than one in five Solo parents cohabited with the father of their child before birth. Only 6% were ever married to the father of their child.
- Crisis pregnancies were significantly associated with reduced likelihood of contact with the child's father after birth and reduced likelihood of receiving financial support from the father.
- Absence of parental contact or financial contribution was not associated with a range of health outcomes, though lack of financial support did predict lower birth weight.

³³ Controlling for marital status, income, chronic disability, smoking and/or drinking while pregnant, crisis pregnancy (either type), and complications during pregnancy.

5. Policy Implications

In all of the substantive domains explored in this report, significant differences by marital status obtained across a great many models. This highlights the continued and on-going importance of policies and advice services targeted specifically at Unmarried-cohabitant parents and at Solo parents.

Crisis pregnancy

- The findings regarding the effects of age and maternal health on the likelihood of experiencing crisis pregnancy suggest the utility of appropriately targeting advice and/or support services where this is not already happening, i.e. towards those women who are relatively quite young or quite old at age of childbirth, and towards pregnant women with known and serious health problems.
- The same rationale applies with regard to targeting advice on the basis of marital status, as the findings here show that Unmarried-cohabitants and Solo parents have a higher likelihood of experiencing crisis pregnancy compared to Married parents.
- The finding that crisis pregnancy is associated with experience of depression points to the importance of ensuring that adequate post-pregnancy mental health advice and support services are in place for women who have experienced a crisis pregnancy.
- All of the foregoing highlights the importance of having adequate data regarding women's self-reported perceptions of crisis in pregnancy. Healthcare professionals will be best placed to collect and act on this data and should be adequately supported to ensure they can do so.
- While the present study relies on a constructed measure of crisis pregnancy, future research may benefit by including specific questions in large-scale surveys like *Growing Up in Ireland* concerning whether or not women self-report their pregnancy as a crisis.

Life and Lifestyle, Contact with Fathers

- Findings regarding poor health behaviours among Solo and Unmarried-cohabitant parents during and after pregnancy point to an important and on-going role for targeted information and awareness-raising efforts, e.g. regarding vaccination schedules and the dangers of smoking while pregnant.

- Financial constraint is directly implicated in choice of childcare arrangements, especially for Solo parents, and this impacts directly on their ability to engage in paid employment or to improve their skill levels through education. These findings suggest that securing full or extensive labour market participation among groups such as Solo parents must require practical advice and support on securing adequate childcare.
- The findings around Solo parents' work habits, their usage of the welfare system and their much higher incidence of welfare dependency and material deprivation indicate that assistance with entering the labour market would indeed be highly beneficial for this group. It also suggests that further research may be needed to understand exactly how Solo parents are supporting themselves.
- For Solo parents, the finding that half of fathers make no financial contribution at all suggests a need to ensure that Solo parents have recourse to a range of advice and assistance services that may help them to understand the supports available to them and to secure their legal entitlements. The same rationale holds for women who experience crisis pregnancy, as results show this group are also much less likely to have post-pregnancy contact with the father.

6. References

- Amato, P. R., and J. G. Gilbreth. 1999. "Nonresident Fathers and Children's Well-being: A Meta-analysis." *Journal of Marriage and the Family*: 557–573.
- Anthony, L. G, B. J Anthony, D. N Glanville, D. Q Naiman, C. Waanders, and S. Shaffer. 2005. "The Relationships Between Parenting Stress, Parenting Behaviour and Preschoolers' Social Competence and Behaviour Problems in the Classroom." *Infant and Child Development* 14 (2): 133–154.
- Aquilino, W. S. 1996. "The Life Course of Children Born to Unmarried Mothers: Childhood Living Arrangements and Young Adult Outcomes." *Journal of Marriage and the Family*: 293–310.
- Baydar, N., and J. Brooks-Gunn. 1991. "Effects of Maternal Employment and Child-care Arrangements on Preschoolers' Cognitive and Behavioral Outcomes: Evidence from the Children of the National Longitudinal Survey of Youth." *Developmental Psychology*; *Developmental Psychology* 27 (6): 932.
- Berger, L., J. Brooks-Gunn, C. Paxson, and J. Waldfogel. 2008. "First-year Maternal Employment and Child Outcomes: Differences Across Racial and Ethnic Groups." *Children and Youth Services Review* 30 (4): 365–387.
- Brooks-Gunn, J., W. J Han, and J. Waldfogel. 2002. "Maternal Employment and Child Cognitive Outcomes in the First Three Years of Life: The NICHD Study of Early Child Care." *Child Development* 73 (4): 1052–1072.
- Brown, G. W, and P. M Moran. 1997. "Single Mothers, Poverty and Depression." *Psychological Medicine* 27 (1): 21–33.
- Burchinal, M. R, J. E Roberts, R. Riggins Jr, S. A Zeisel, E. Neebe, and D. Bryant. 2000. "Relating Quality of Center-based Child Care to Early Cognitive and Language Development Longitudinally." *Child Development* 71 (2): 339–357.
- Carlson, M. J, and M. E Corcoran. 2001. "Family Structure and Children's Behavioral and Cognitive Outcomes." *Journal of Marriage and Family* 63 (3): 779–792.
- Carlson, M. J, S. S McLanahan, and J. Brooks-Gunn. 2008. "Coparenting and Nonresident Fathers' Involvement with Young Children After a Nonmarital Birth." *Demography* 45 (2): 461–488.
- Cooper, C. E, S. S McLanahan, S. O Meadows, and J. Brooks-Gunn. 2009. "Family Structure Transitions and Maternal Parenting Stress." *Journal of Marriage and Family* 71 (3): 558–574.
- CSO. 2007. *2006 Census of Population: Principal Demographic Results*. Central Statistics Office.
- DeKlyen, M., J. Brooks-Gunn, S. McLanahan, and J. Knab. 2006. "The Mental Health of Married, Cohabiting, and Non-coresident Parents with Infants." *Journal Information* 96 (10).
- Forrest, J. D, and S. Singh. 1990. "The Sexual and Reproductive Behavior of American Women, 1982–1988." *Family Planning Perspectives*: 206–214.
- Fuchs, V. R. 2004. "Reflections on the Socio-economic Correlates of Health." *Journal of Health Economics* 23 (4): 653–661.
- Furstenberg, F.F. Jr, S. P Morgan, and P. D Allison. 1987. "Paternal Participation and Children's Well-being After Marital Dissolution." *American Sociological Review*: 695–701.
- Gennetian, L. A. 2005. "One or Two Parents? Half or Step Siblings? The Effect of Family Structure on Young Children's Achievement." *Journal of Population Economics* 18 (3): 415–436.
- Jaccard, J., T. Dodge, and P. Dittus. 2003. "Do Adolescents Want to Avoid Pregnancy? Attitudes Toward Pregnancy as Predictors of Pregnancy." *Journal of Adolescent Health* 33 (2): 79–83.
- Jackson, A. P, and R. Scheines. 2005. "Single Mothers' Self-efficacy, Parenting in the Home Environment, and Children's Development in a Two-wave Study." *Social Work Research* 29 (1): 7–20.

- Kalenkoski, C. M, D. C Ribar, and L. S Stratton. 2007. "The Effect of Family Structure on Parents' Child Care Time in the United States and the United Kingdom." *Review of Economics of the Household* 5 (4): 353–384.
- Kiernan, K. 2005. *Non-residential Fatherhood and Child Involvement: Evidence from the Millenium Cohort Study*. London: Centre for Analysis of Social Exclusion, LSE.
- King, V. 1994. "Nonresident Father Involvement and Child Well-being: Can Dads Make a Difference?" *Journal of Family Issues* 15 (1): 78–96.
- Lunn, P., T. Fahey, and C. Hannan. 2010. *Family Figures: Family Dynamics and Family Types in Ireland, 1986-2006 [FSA, ESRI]*. Dublin, Ireland: ESRI/Family Support Agency.
- Mahon, E., C. Conlon, and L. Dillon. 1998. *Women and Crisis Pregnancy: A Report Presented to the Dept of Health and Children*. Dublin: Government Publications Office.
- McBride, O., K. Morgan, and H. McGee. 2012. *Irish Contraception and Crisis Pregnancy Study 2010 [ICCP-2010]. A Survey of the General Population*. Dublin: Crisis Pregnancy Agency.
- McLanahan, S. 1999. "Father Absence and the Welfare of Children." In *Coping with Divorce, Single Parenting, and Remarriage: A Risk and Resiliency Perspective*, ed. E. Mavis Hetherington.
- Orr, S. T, S. A James, B. J Burns, and B. Thompson. 1989. "Chronic Stressors and Maternal Depression: Implications for Prevention." *American Journal of Public Health* 79 (9): 1295–1296.
- Osborne, C., and S. McLanahan. 2007. "Partnership Instability and Child Well-Being." *Journal of Marriage and Family* 69 (4): 1065–1083.
- Quail, A., J. Williams, C. McCrory, A. Murray, and M. Thornton. 2011. *A Summary Guide to Wave 1 of the Infant Cohort (at 9 Months) of Growing Up in Ireland*. Dublin: ESRI/TCD.
- Simons, R. L, L. B Whitbeck, J. Beaman, and R. D Conger. 1994. "The Impact of Mothers' Parenting, Involvement by Nonresidential Fathers, and Parental Conflict on the Adjustment of Adolescent Children." *Journal of Marriage and the Family*: 356–374.
- StataCorp. 2009a. *Stata Multivariate Statistics Reference Manual*. Release 11. Statistical Software. College Station, Texas: StataCorp LP.
- . 2009b. *Stata Base Reference Manual*. Release 11. Statistical Software. College Station, Texas: StataCorp LP.
- Stevens-Simon, C., L. Kelly, D. Singer, and A. Cox. 1996. "Why Pregnant Adolescents Say They Did Not Use Contraceptives Prior to Conception." *Journal of Adolescent Health* 19 (1): 48–53.
- Thompson Jr, R. J, K. A Merritt, B. R Keith, L. B Murphy, and D. A Johndrow. 1993. "The Role of Maternal Stress and Family Functioning in Maternal Distress and Mother-reported and Child-reported Psychological Adjustment of Nonreferred Children." *Journal of Clinical Child Psychology* 22 (1): 78–84.
- Thomson, E., T. L Hanson, and S. S McLanahan. 1994. "Family Structure and Child Well-being: Economic Resources Vs. Parental Behaviors." *Social Forces* 73 (1): 221–242.
- Waldfoegel, J. 2002. "Child Care, Women's Employment, and Child Outcomes." *Journal of Population Economics* 15 (3): 527–548.
- Wooldridge, J. M. 2009. *Introductory Econometrics: A Modern Approach*. 4th ed. Ohio, US: South Western Cengage Learning.

7. Appendix

Determinants of Difficult and Crisis Pregnancy Types: logistic regression (odds ratios)

	U	S	GC	PC
main				
Married	1.000 (.)	1.000 (.)	1.000 (.)	1.000 (.)
Unmarried	2.789*** (0.261)	1.321*** (0.119)	2.926*** (0.464)	2.976*** (0.545)
Solo	8.003*** (0.911)	1.158 (0.139)	5.368*** (0.951)	4.368*** (0.914)
1b.Equivalised Household Annual Income	1.000 (.)	1.000 (.)	1.000 (.)	1.000 (.)
2.Equivalised Household Annual Income	1.104 (0.116)	1.039 (0.113)	0.999 (0.163)	1.104 (0.210)
3.Equivalised Household Annual Income	0.710*** (0.085)	1.056 (0.114)	0.612*** (0.113)	0.733 (0.160)
4.Equivalised Household Annual Income	0.638*** (0.085)	1.090 (0.128)	0.675* (0.147)	0.704 (0.183)
5.Equivalised Household Annual Income	0.477*** (0.075)	0.889 (0.115)	0.445*** (0.121)	0.370*** (0.124)
Age (5yr blocks)	0.780*** (0.039)	0.880*** (0.043)	0.792*** (0.057)	0.731*** (0.059)
Age^2 (squared)	1.004*** (0.001)	1.002*** (0.001)	1.004*** (0.001)	1.005*** (0.001)
No. of Children in Hsd	1.355*** (0.051)	1.175*** (0.040)	1.350*** (0.070)	1.385*** (0.082)
Health: Poor/Fair=1	1.421** (0.197)	1.447*** (0.177)	1.465** (0.275)	1.765*** (0.375)
Gets Enough Help/Support (=1)	0.977 (0.086)	0.902 (0.070)	0.774* (0.111)	0.918 (0.155)
Family history of poverty (=1)	0.949 (0.089)	1.133 (0.092)	0.937 (0.142)	0.770 (0.139)
Had Complications in pregnancy (=1)	1.059 (0.080)	1.910*** (0.132)	1.885*** (0.243)	1.728*** (0.254)
worked Part-time before pregnancy (=1)	0.897 (0.081)	1.076 (0.086)	1.013 (0.146)	0.867 (0.149)
English is native language (=1)	0.782** (0.085)	1.174 (0.120)	0.944 (0.168)	0.881 (0.188)
Region: Urban=0, Rural=1	0.866* (0.067)	1.051 (0.071)	0.784** (0.096)	0.835 (0.118)
Constant	8.129*** (5.875)	0.410 (0.296)	0.989 (0.987)	1.845 (2.043)
N	9857	9865	9858	9866
F-test	0.000	0.000	0.000	0.000
AIC	7158	8325	3274	2497

Note: Income in quintiles (1=lowest); Married is ref. cat. for marital status

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

Note: U = Unintended; S = Stressful; GC = Generalised Crisis; PC = Pregnancy Crisis.

Depression scale for PCG

	GC	PC
1b. Equivalised Household Annual Income	0.000	0.000
	(.)	(.)
2. Equivalised Household Annual Income	-0.063	-0.077
	(0.165)	(0.165)
3. Equivalised Household Annual Income	-0.129	-0.160
	(0.152)	(0.152)
4. Equivalised Household Annual Income	-0.239	-0.259*
	(0.148)	(0.148)
5. Equivalised Household Annual Income	-0.446***	-0.467***
	(0.153)	(0.152)
1b. Education level	0.000	0.000
	(.)	(.)
2. Education level	0.790***	0.801***
	(0.278)	(0.278)
3. Education level	0.596**	0.611**
	(0.277)	(0.276)
4. Education level	0.565**	0.577**
	(0.281)	(0.281)
5. Education level	0.498*	0.512*
	(0.289)	(0.288)
Married	0.000	0.000
	(.)	(.)
Unmarried	0.651***	0.679***
	(0.124)	(0.124)
Solo	1.188***	1.290***
	(0.193)	(0.190)
Age (5yr blocks)	-0.014	-0.015*
	(0.009)	(0.009)
Gets Enough Help/Support (=1)	-0.995***	-1.008***
	(0.105)	(0.105)
No. of Children in Hsd	-0.012	-0.002
	(0.043)	(0.043)
Health: Poor/Fair=1	2.802***	2.814***
	(0.276)	(0.276)
Region: Urban=0, Rural=1	0.018	0.009
	(0.087)	(0.087)
GC	1.714***	
	(0.273)	
PC		1.425***
		(0.306)
Constant	2.600***	2.658***
	(0.406)	(0.407)
N	9853	9857
F-test	0.000	0.000
AIC	52257	52330

Note: Income in quintiles (1=lowest); Married is ref. cat. for marital status

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

Mothers not feeling 'intense affection' for child: logistic regression (odds ratios)

	GC	PC
LACK_AFFECTION		
Married	1.000 (.)	1.000 (.)
Unmarried	1.041 (0.160)	1.040 (0.160)
Solo	1.345* (0.234)	1.351* (0.234)
1b.Equivalised Household Annual Income	1.000 (.)	1.000 (.)
2.Equivalised Household Annual Income	0.928 (0.150)	0.924 (0.149)
3.Equivalised Household Annual Income	0.883 (0.151)	0.878 (0.150)
4.Equivalised Household Annual Income	0.667** (0.130)	0.666** (0.130)
5.Equivalised Household Annual Income	0.678* (0.141)	0.677* (0.141)
Age (5yr blocks)	0.878* (0.064)	0.880* (0.064)
Age^2 (squared)	1.002* (0.001)	1.002* (0.001)
No. of Children in Hsd	1.067 (0.060)	1.067 (0.059)
Health: Poor/Fair=1	1.400* (0.263)	1.395* (0.263)
Gets Enough Help/Support (=1)	0.670*** (0.083)	0.669*** (0.083)
Family history of poverty (=1)	1.075 (0.143)	1.076 (0.143)
Had Complications in pregnancy (=1)	0.861 (0.096)	0.863 (0.095)
Worked Part-time before pregnancy (=1)	0.911 (0.121)	0.912 (0.121)
English is native language (=1)	0.725** (0.107)	0.728** (0.108)
Region: Urban=0, Rural=1	1.135 (0.127)	1.135 (0.127)
GC	1.321 (0.288)	
PC		1.483 (0.370)
Constant	0.544 (0.578)	0.524 (0.558)
N	9853	9861
F-test	0.000	0.000
AIC	4051	4050

Note: Income in quintiles (1=lowest); Married is ref. cat. for marital status

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

Solo and unmarried-cohabitant parenthood and crisis pregnancy in Ireland

Child's weight at birth

	GC	PC
Drank alcohol while pregnant (=1)	0.034** (0.017)	0.034** (0.017)
Smoked while pregnant (=1)	-0.208*** (0.021)	-0.208*** (0.021)
Married	0.000 (.)	0.000 (.)
Unmarried	-0.000 (0.020)	0.000 (0.020)
Solo	-0.009 (0.028)	-0.009 (0.028)
1b.Equivalised Household Annual Income	0.000 (.)	0.000 (.)
2.Equivalised Household Annual Income	0.021 (0.024)	0.021 (0.024)
3.Equivalised Household Annual Income	0.047* (0.025)	0.047* (0.025)
4.Equivalised Household Annual Income	0.088*** (0.025)	0.088*** (0.025)
5.Equivalised Household Annual Income	0.068** (0.027)	0.068** (0.027)
Age (5yr blocks)	0.022* (0.011)	0.022* (0.011)
Age^2 (squared)	-0.000** (0.000)	-0.000** (0.000)
No. of Children in Hsd	0.016* (0.008)	0.016* (0.008)
Health: Poor/Fair=1	-0.058* (0.034)	-0.057* (0.034)
Gets Enough Help/Support (=1)	-0.001 (0.017)	-0.001 (0.018)
Family history of poverty (=1)	0.005 (0.018)	0.004 (0.018)
Had Complications in pregnancy (=1)	-0.125*** (0.014)	-0.126*** (0.014)
Worked Part-time before pregnancy (=1)	0.081*** (0.016)	0.081*** (0.016)
English is native language (=1)	0.041* (0.023)	0.041* (0.023)
Region: Urban=0, Rural=1	0.037** (0.015)	0.037** (0.015)
GC	-0.021 (0.038)	
PC		-0.025 (0.041)
Constant	3.150*** (0.168)	3.149*** (0.167)
N	9762	9770
F-test	0.000	0.000
AIC	17453	17463

Note: Income in quintiles (1=lowest); Married is ref. cat. for marital status
 * p<0.10, ** p<0.05, *** p<0.01

Drinking and Crisis Pregnancy: logistic regression (odds ratios)

	GC	PC
Drank alcohol while pregnant (=1)		
Married	1.000 (.)	1.000 (.)
Unmarried	0.981 (0.080)	0.986 (0.081)
Solo	1.245* (0.147)	1.267** (0.147)
1b.Education level	1.000 (.)	1.000 (.)
2.Education level	1.017 (0.246)	1.018 (0.247)
3.Education level	1.368 (0.331)	1.366 (0.331)
4.Education level	1.579* (0.386)	1.577* (0.385)
5.Education level	1.907*** (0.473)	1.905*** (0.473)
1b.Equivalised Household Annual Income	1.000 (.)	1.000 (.)
2.Equivalised Household Annual Income	1.243* (0.140)	1.237* (0.140)
3.Equivalised Household Annual Income	1.526*** (0.172)	1.516*** (0.170)
4.Equivalised Household Annual Income	1.588*** (0.172)	1.580*** (0.170)
5.Equivalised Household Annual Income	2.187*** (0.242)	2.177*** (0.240)
GC	1.345* (0.207)	
PC		1.288 (0.239)
Constant	0.125*** (0.030)	0.126*** (0.030)
N	9921	9930
F-test	0.000	0.000
AIC	9859	9864

Note: Income in quintiles (1=lowest); Married is ref. cat. for marital status

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

How often do you talk to baby's father about baby? (odds ratios)

	GC	PC
TALK_FATHER		
DISTANCE[Ref: Outside Country]:<30mins	0.060*** (0.014)	0.060*** (0.014)
DISTANCE: 30mins - 1hour	0.160*** (0.045)	0.164*** (0.047)
DISTANCE: >1hour	0.313*** (0.089)	0.314*** (0.088)
1b.Equivalised Household Annual Income -	1.000 (.)	1.000 (.)
2.Equivalised Household Annual Income -	0.936 (0.147)	0.928 (0.147)
3.Equivalised Household Annual Income -	1.063 (0.236)	1.035 (0.230)
4.Equivalised Household Annual Income -	1.097 (0.322)	1.090 (0.327)
5.Equivalised Household Annual Income -	1.699 (1.258)	1.653 (1.224)
Age (5yr blocks)	0.995 (0.012)	0.995 (0.012)
GC	1.469* (0.293)	
PC		1.413 (0.316)
cut1		
Constant	0.041*** (0.016)	0.040*** (0.016)
cut2		
Constant	0.116*** (0.045)	0.112*** (0.043)
cut3		
Constant	0.254*** (0.094)	0.245*** (0.090)
cut4		
Constant	0.333*** (0.123)	0.322*** (0.118)
cut5		
Constant	0.462** (0.172)	0.446** (0.165)
N	1106	1106
F-test	0.000	0.000
AIC	4048	4051

Note: Income in quintiles (1=lowest)

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

Does baby's father make a financial contribution? (NO=1) (odds ratios)

	GC	PC
FATHER_PAYMENT		
DISTANCE[Ref: Outside Country]:<30mins	0.075*** (0.025)	0.074*** (0.024)
DISTANCE: 30mins - 1hour	0.165*** (0.062)	0.165*** (0.063)
DISTANCE: >1hour	0.265*** (0.102)	0.265*** (0.102)
1b.Equivalised Household Annual Income	1.000 (.)	1.000 (.)
2.Equivalised Household Annual Income	0.788 (0.148)	0.785 (0.148)
3.Equivalised Household Annual Income	0.699 (0.200)	0.701 (0.201)
4.Equivalised Household Annual Income	0.622 (0.255)	0.627 (0.255)
5.Equivalised Household Annual Income	1.391 (0.796)	1.406 (0.805)
Age (5yr blocks)	1.021 (0.014)	1.021 (0.014)
GC	1.297 (0.304)	
PC		1.659* (0.434)
Constant	4.995*** (2.301)	4.967*** (2.266)
N	1106	1106
F-test	0.000	0.000
AIC	1686	1682

Note: Income in quintiles (1=lowest)

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

Solo and unmarried-cohabitant parenthood and crisis pregnancy in Ireland

How often does baby have contact with biological father? (odds ratios)

	GC	PC
<hr/>		
CONTACT_FATHER		
DISTANCE[Ref: Outside Country]:<30mins	0.024*** (0.006)	0.024*** (0.006)
DISTANCE: 30mins - 1hour	0.091*** (0.026)	0.094*** (0.027)
DISTANCE: >1hour	0.254*** (0.069)	0.255*** (0.069)
1b.Equivalised Household Annual Income -	1.000 (.)	1.000 (.)
2.Equivalised Household Annual Income -	0.959 (0.156)	0.950 (0.156)
3.Equivalised Household Annual Income -	1.277 (0.316)	1.234 (0.306)
4.Equivalised Household Annual Income -	1.541 (0.555)	1.532 (0.564)
5.Equivalised Household Annual Income -	1.669 (0.761)	1.611 (0.735)
Age (5yr blocks)	0.991 (0.012)	0.990 (0.012)
GC	1.548** (0.305)	
PC		1.392* (0.277)
<hr/>		
cut1		
Constant	0.016*** (0.006)	0.015*** (0.006)
<hr/>		
cut2		
Constant	0.068*** (0.026)	0.065*** (0.025)
<hr/>		
cut3		
Constant	0.126*** (0.047)	0.120*** (0.045)
<hr/>		
cut4		
Constant	0.164*** (0.062)	0.157*** (0.059)
<hr/>		
cut5		
Constant	0.203*** (0.076)	0.194*** (0.073)
<hr/>		
cut6		
Constant	0.294*** (0.112)	0.281*** (0.107)
<hr/>		
N	1106	1106
F-test	0.000	0.000
AIC	3962	3967
<hr/>		

Note: Income in quintiles (1=lowest)
 * p<0.10, ** p<0.05, *** p<0.01

Views on neighbourhood and amenities by marital status

<i>Percentage of people <u>Agreeing or Strongly Agreeing</u> with statement</i>	Married	Unmarried-cohabitant	Solo
It is safe to walk alone in this area after dark*	77%	73%	67%
It is safe for children to play outside during the day in this area*	88%	83%	81%
There are safe parks, playgrounds and play spaces in this area*	66%	66%	63%
We as a family intend to continue living in this area*	88%	81%	79%
As a family we are settled in and part of this community*	91%	86%	86%

*cross-tabulation of statement with marital status showed a significant chi-squared statistic indicating association.

<i>Percentage of respondents agreeing that this service is available in their area</i>	Married	Unmarried-cohabitant	Solo
Regular public transport	66%	71%	77%
GP/health clinic	90%	90%	91%
Schools	97%	97%	97%
Library	75%	75%	76%
Social Welfare Office	63%	69%	73%
Banking/Credit Union	83%	84%	84%
Essential Grocery shopping	95%	96%	95%
Crèche, daycare etc.	90%	90%	89%

Other possible definitions of Crisis Pregnancy

	<i>Did you intend to become pregnant before baby was conceived?</i>	<i>At any time during the pregnancy did you feel under any stress?</i>	<i>Stress due to pregnancy?</i>	<i>Stress only due to pregnancy itself?</i>	<i>% of sample</i>	<i>N</i>
A. High-Stress Generalised Crisis	'Much later' / 'No intention of ever becoming pregnant'	A great deal	Y	N	2.9%	310
B. High-Stress Pregnancy Crisis	'Much later' / 'No intention of ever becoming pregnant'	A great deal	Y	Y	1.1%	119
C. Never Intended Generalised Crisis	'No intention of ever becoming pregnant'	Some — A great deal	Y	N	3.2%	345
D. Never Intended Pregnancy Crisis	'No intention of ever becoming pregnant'	Some — A great deal	Y	Y	2.2%	237
E. Never Intended High Stress Crisis	'No intention of ever becoming pregnant'	A great deal	Y	N	1.1%	117
F. Never Intended High Stress Pregnancy Crisis	'No intention of ever becoming pregnant'	A great deal	Y	Y	0.7%	74