Chapter One

International Trends - Data from Europe

Introduction

Concern with the rate of teenage pregnancy in Britain is heightened when it is viewed in direct comparison with many of its European counterparts and therefore, in order to understand why this concern exists, consideration needs first to be given to the European trends. The first section of this chapter, examines the recent trends in teenage pregnancy and related rates within a European context[1].

The chapter begins by examining trends in live birth, abortion and pregnancy rates across a number of European countries over the last three decades. This is followed by an exploration of some associated factors including socio-economic and educational factors as well as an exploration of potential causal and related factors such as, teenage fertility, coital activity, contraceptive behaviour.

This is then followed by a descriptive account of the Scottish and Finnish national pregnancy, birth and abortion data[2] and an examination of the trends in these rates,

[1] Much previous research often includes within its international contextualisation a comparison with USA rates. I have chosen not to do so here. First, because this information is already widely available (e.g. SEU 1999) and more importantly, because British research often looks to the USA for future directions in many areas of policy. With regard to teenage pregnancy this is not necessarily the best way forward considering that the USA has significantly higher rates of teenage pregnancy than are found in Britain and most of Europe. Therefore the decision was taken to focus on European countries within this thesis, although reference will be made to the USA within the review of the main literature.

[2] Whilst acknowledging that there are regional and local differences in both Scotland (ISD Scotland 1987, 1998, 1999, 2000; Turner 2000) and Finland (Kosunen & Rimpelä 1996a, 1996b), this research focuses on national trends alone and therefore only national trends will be compared within this chapter.

in particular between the 1980s and 1990s. In attempting to account for the trends in Scotland and Finland, the latter section of the chapter presents an exploration of some associated and causal factors.

European trends

Comparable statistics

Before considering international trends in teenage pregnancy, a number of limitations of the available data require comment. First, despite literature often claiming to present data on conception rates (for example see Kane & Wellings 1999), it is not possible to obtain total conception data (Turner 2000). Also, obtaining an overall picture of teenage pregnancy rates across Europe is difficult, it is often not possible to make direct comparisons because obtaining like data is problematic.

Most noted are the difficulties in acquiring accurate data on abortions. Whilst in most European countries induced abortion is legalised, the statistics that represent this procedure are often far from complete. According to David (1992) only eleven countries in Europe currently provide reliable data on abortions with countries such as France, Italy and Germany providing data which is either incomplete or inaccurate. In most industrialised nations, however, comparisons of live birth rates can be used as a useful indicator as these rates are closely correlated with abortion rates (Kosunen 1996).

Additionally, pregnancy, live birth and abortion rates are often grouped together for comparison, the most common grouping for the teenage years being the

grouping 15-19. As illustrated later in this chapter however, when comparison focuses on the trends in Scotland and Finland, direct comparisons are not possible. In Scotland, because there are a significant number of pregnancies to women under the age of sixteen, the main source of published data on teenage pregnancy produced by ISD Scotland is done so with three groupings namely, 13-15, 16-19 and 13-19. With so few pregnancies under sixteen in Finland, there is only one grouping namely, 15-19. Further to this, countries such as Finland often include the very small number of pregnancies to under-15s within the rates of the 15-19 age grouping without including the baseline population data within which those pregnancies have occurred.

In relation to those age groupings, the European rates as a whole presented in this chapter should also be viewed with caution as the base population used to calculate the rates often varies between countries. Whilst some countries will calculate rates for 15-19 year olds with the population data for that age grouping, others such as the Netherlands use data for the under 20s.

For the purpose of this study, it is the trends that are important and therefore it is not imperative to have directly comparable rates. When consideration is focused on comparing the trends in Scotland and Finland however, it is important to remember that the rates cannot be directly compared.

Comparable Terminology

'Teenage' is an ambiguous term in all contexts as it refers to a number of different age groupings, some of which are perceived to be of more concern than others in

relation to pregnancy. Additionally, there are considerable differences in the actual rates and the outcomes of pregnancy between younger and older teenagers, which is not always obvious when rates are grouped by ages 15-19.

The term 'teenage' is often used interchangeably with 'young', 'adolescent' and 'under-age', all of which can translate to mean different age groupings. Throughout this thesis I commonly refer to policy relating to young people (men and women), as well as 'teenage pregnancy'. For the purpose of this thesis, when referring to the literature, the terminology used will be that of the original author/s.

Where reference is made to young people or 'teenage pregnancy' within the data and analysis of this research, the age definition unless otherwise stated is for those under 16[1], which is the age group targeted by the British government's *Health of the nation* White Paper (1992)[2] and the Scottish Executive's White Paper *Towards a Healthier Scotland (1999)*. Additionally reference is made within this chapter to 'older' and 'younger' groups of teenagers. Unless otherwise stated these definitions relate to 16-19 and 13-15 year olds respectively. Whilst the concern of this research lies primarily with compulsory school-age pregnancy, due to the limitations of the European data, the overview of European trends in this chapter refers primarily to the category of 15-19 year old women. Therefore, reference to 'teenage' in relation to the European trends and rates in this chapter, unless otherwise stated, refers to those aged 15-19.

[1] The lower limit of this age grouping has not been stated because although teenage technically refers to those aged 13 plus, pregnancies to young women has transcended that age barrier. There are a number of pregnancies that occur at age 10,11 and 12. Therefore, within this research when reference is made to 'teenage pregnancy' this should be taken to include the small number of pregnancies to those under the age of 13.

[2] This White Paper is relevant only to England and Wales.

Within this thesis, a number of terms are used when reference is being made to the countries that make up the UK. As I make a very strong case for the proper use of such terminology and so as to avoid falling into the same trap as those who I criticise, the following sets out the way in which these various terms are used throughout this thesis. The UK refers to Scotland, Northern Ireland, England and Wales, Britain refers only to Scotland, England and Wales. Where I use either term of reference within the literature, I am using the term used first by the original author.

Trends in the Live Birth Rate

Throughout most of Western Europe, increased sexual activity amongst teenagers throughout the 1960s resulted in an increased rate of live births peaking between 10 and 57 per 1000 women aged 15-19 during the 1970s for most countries (UN 1988a). For most of Northern and Western Europe between the 1970s and 1980s the live birth rate amongst teenagers saw a continual decline whilst during the early to late 1970s many countries in Eastern and Southern Europe saw a steady rise, before once more starting to decline in the mid-1980s.

By the mid-1980s most countries in Northern and Western Europe had live birth rates per 1000 women aged 15-19 of between 7 and 30. In Southern Europe the live birth rate in countries such as Greece and Portugal ranged between 30 and 50 per 1000 women aged 15-19, others such as Spain and Italy however, were already seeing declines more like those of Western and Northern Europe. At the same time some Eastern European countries such as Czechoslovakia, Romania and Hungary

(a notable exception being Poland), had rates averaging over 50 per 1000 women aged 15-19 (UN 1988a).

By the mid-1990s, most countries throughout all areas of Europe with the exception of Scotland, England, Wales and Northern Ireland were still witnessing a continual decline in live birth rates for women aged 15-19. Although some countries in Eastern Europe still had higher rates than the UK, for the rest of Europe, the rate of live birth in the 1990s ranged between 5.5 and 21.5 per 1000 (Kane & Wellings 1999).

What is most notable in the declining trend in live birth rates to women aged 15-19 over the last three decades, is the percentage reduction. Although almost every country in Europe of those reviewed in Table 1.1 (below) had a reduction of between 30 to 70%, the UK had only managed a reduction of 8.6% in Scotland, 14% in Northern Ireland and 0% in England and Wales.

Table 1.1

European Live Birth Rates for the female population aged 15-19 by country and year.

	Year							
	1977	1980	1983	1986	1989	1992	1995	% reduction 1977-1995
Country								
Bulgaria	78.6	79.0	79.4	77.1	69.9	67.2[13]	54.0	31.3
Romania	71.7	72.9	58.2	57.8[9]	60.0	48.0	40.5[15]	43.5
Hungary	74.2	68.7	53.9	49.3	41.2	36.1	29.9[15]	59.7
Eng & Wales	29.8	30.9	26.9	30.1	32.0	31.7	29.8[15]	0
Scotland	**32.6**	**32.6**	**28.8**	**30.8[3]**	**31.2**	**33.1**	**29.6[15]**	**8.6**
N. Ireland	30.1	29.7	28.1	30.3	29.2	30.5	25.9[14]	14.0
Iceland	56.2	56.8	41.0	31.8[8]	29.1	27.1	21.5[15]	61.7
Poland	33.6	32.9	34.2	35.1	31.6	32.2	21.1[15]	37.2
Portugal	48.0	40.2	37.4	30.1	26.3	22.7[13]	20.9[15]	56.5
CZEC rep	56.1	51.3	53.7	49.3[10]	44.3	42.9[13]	20.6	63.3
Austria	37.6	35.3	29.7	24.8[9]	21.8	23.1	15.6[15]	58.5
Ireland [1] [3]	21.2	23.0	19.0	16.8[9]	15.1	16.5[12]	15.4[15]	27.4
Norway	32.4	25.3	19.8	17.7[10]	17.8[1]	16.0[1]	13.6	58.0
Greece	48.6	53.1	43.7	41.2[8]	21.8[11]	18.9	13.0	73.3
Luxembourg	19.3	17.1[5]	14.1	10.7[9]	11.6[10]	14.1[13]	10.7	44.6
Malta	15.7	13.1	15.3	12.7	11.9	12.3	10.3	34.4
Finland	**24.2**	**18.9**	**15.7**	**12.9**	**11.8**	**11.7**	**9.8[15]**	**60.0**
Denmark	22.0	16.3	10.6	9.7	9.1[11]	9.9	8.8	60.0
France[2]	22.1	18.1	13.9	10.9	9.2	7.9[13]	7.9	64.3
Spain	26.7[4]	25.6	18.3	16.7	13.4[11]	8.3	7.8[13]	70.8
Sweden	22.1	15.8	11.7	11.4	12.7	12.0	7.8[15]	64.7
Italy	26.3	19.9	16.9[6]	13.7[8]	9.8[11]	8.0[12]	6.8	74.1
Switzerland	10.4	9.9	7.9[7]	6.5	7.1[11]	7.4	5.7[15]	45.2
Netherlands	10.1	9.2	7.7	6.8	7.6	7.7	5.6[15]	44.6

General notes

Rates are the number of live births by age of mother per 1000 corresponding female population.
Rates are computed on female population aged 15-19 unless otherwise stated.
Order of countries is set by rate of live births for the year 1995.

[1] Age classification based on year of birth of mother rather than exact date of birth of child.
[2] Date tabulated by date of registration rather than occurrence.
[3] Births registered within one year of occurrence.

[4] 1978 [8] 1984 [12] 1991
[5] 1981 [9] 1985 [13] 1993
[6] 1982 [10] 1987 [14] 1994
[7] 1984 [11] 1990 [15] 1996

Sources: UN Demographic yearbooks (1981 1982 1984 1985 1986 1987 1988a, 1988b 1989 1990 1991 1992 1993 1996 1997 1998).

Trends in the Abortion Rate

Although accurate data is not readily available for many European countries, it is possible to note from the available data that after legal abortion became an option in most Western European countries during the 1970s, the number of legally induced abortions to young women began to rise. This occurred simultaneously as the birth rate started to decline.

In Northern Europe, the proportion of young women who aborted as opposed to giving birth peaked at approximately one quarter of all pregnancies to teenage women. In Sweden, the peak occurred relatively early in 1974. In Finland and Norway it was 1980. In Denmark however, the proportion of induced abortions never rose above one fifth of all pregnancies (Kosunen 1996). Throughout the 1980s the proportion of abortions to births declined to some extent (some more than others) in all four of those countries.

In Britain the situation was quite different[1]. The abortion rate in Britain rose dramatically from 1968 to 1973 at which point it then fluctuated around 15-20 per 1000 women aged 15-19 for the duration of the mid-late 1970s (Bury 1984). Throughout the 1980s the abortion rates in Scotland, England and Wales once again had begun to rise, an increase that continued throughout the 1990s and as of 1998 it was still continuing to rise (Kane & Wellings 1999).

For those other countries in Western Europe where it is possible to acquire relatively accurate data, a similar pattern of slightly declining rates since a peak in

[1] The trend in abortions in Scotland will be examined in more detail in later sections of this chapter.

the mid 1970s has been detected (Henshaw and Morrow 1990). The Netherlands however is the exception, in that their birth and abortion rates have remained very low since the beginning of the 1970s (Kosunen 1996).

Table 1.2 below, shows the abortion rates on the basis of the latest available statistics for a number of European countries. As with the live birth rate, it appears that collectively, Britain has a rate higher than any other Western European country, although it remains lower than a number of Eastern European countries.

Table 1.2

Legal abortions per 1000 women aged 15-19 by country in 1996 (or latest available year)

Country	Rate
Bulgaria	33.7
Romania*	32.0
Hungary	29.6
Iceland	21.2
England & Wales	20.2
Scotland	18.8
Norway	18.7
Sweden	17.2
Denmark	14.4
Czech Republic	12.3
Finland	10.7
Italy*	5.1
Netherlands	4.0
Germany	3.6
Greece	1.5

General notes

* Indicates abortion data are less than 80% complete.
Year is 1996 unless noted: 1992 - the Netherlands, 1994 - England and Wales, Greece, 1995 - Bulgaria, Denmark, Germany and Italy, 1998 - Scotland.
Source is Singh & Darroch 2000 unless noted: Data for England and Wales source: Kane and Wellings (1999). Data for Scotland source: ISD Scotland (2000). Data for the Netherlands and Scotland: Abortion data are for women under 20 instead of 15-19.

Trends in the Pregnancy rate

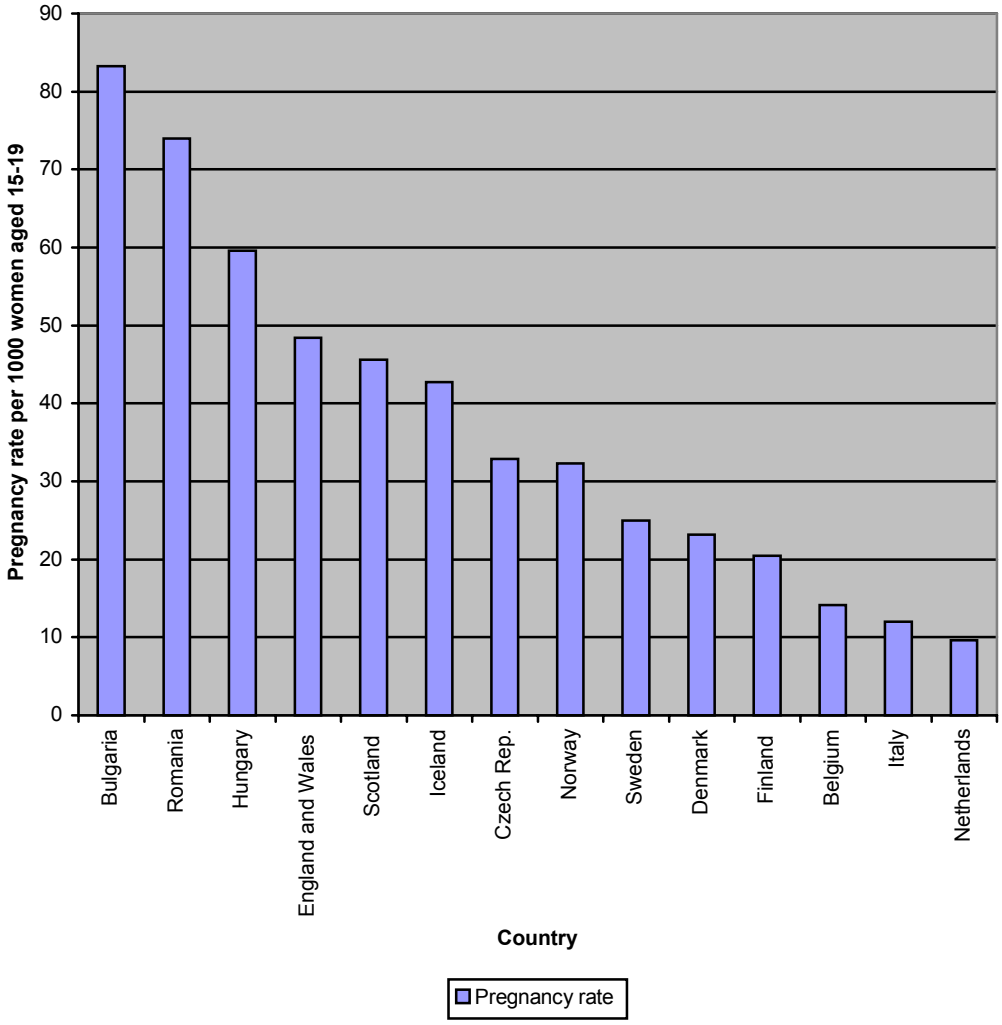
In order to gain an approximate idea of pregnancy rates in young women, proxy rates have been obtained by combining live birth and abortion rates for a selection of European countries where both data sets were available. Figure 1.1[1] below details the approximated pregnancy rates for these selected countries in 1996 (or latest available year). Of the data available, the most accurate is again for Northern European countries, Scotland, England and Wales and the Netherlands, although data is also available for a small number of Eastern European countries (such as Hungary and Czechoslovakia). Data for Italy and Romania is only 80% accurate (Singh & Darroch 2000).

Starting in the early 1970s the pregnancy rates to women aged 15-19 in Hungary, Bulgaria and Romania were considerably higher than most other European countries, although by the end of that decade the rates were declining at a very marked rate. This declining trend has continued throughout the 1990s although at a slower rate of decline than was witnessed throughout the 1980s. A similar pattern (although starting from a rate of approximately two thirds that of Hungary) has been witnessed in Czechoslovakia (UN 1988a: UN Demographics 1981, 1982, 1984, 1985, 1986, 1987, 1988b, 1989, 1990, 1991, 1992, 1993, 1996, 1997, 1998).

[1] Data for this figure can be found in Appendix i.

Figure 1.1

Approximated pregnancy rates for selected countries per 1000 women aged 15-19 in 1996 (or latest available year)



General notes

The year for both abortion and birth data is 1996 unless noted below:
1998 birth and abortion data - Scotland.
1995 birth rate - Bulgaria, Norway & Denmark.
1995 abortion rate - England and Wales and Belgium.
1993 birth and abortion data - Romania.
1992 birth and abortion data - the Netherlands.
Abortion data for Romania and Italy are only 80% accurate.
Data for Scotland and the Netherlands - birth & abortion data are for women younger than 20 not just 15-19.
Sources: Abortion data from Singh & Darroch (2000); Birth data from UN Demographic Yearbooks (1996, 1997,1998); Scottish data from ISD Scotland (2000).

Amongst Northern European countries the declining trend in teenage pregnancy began in the mid-1970s and has continued throughout the 1980s and 1990s, although again showing a slower rate of decline throughout the 1990s (Kosunen 1996). Throughout the 1970s, 1980s and 1990s, the Netherlands has shown a remarkably low rate of teenage pregnancy. Despite starting from a rate lower than all other European countries, its rate has continued to decline throughout those three decades (UN 1988a: UN Demographics 1981, 1982, 1984, 1985, 1986, 1987, 1988b, 1989, 1990, 1991, 1992, 1993, 1996, 1997, 1998). With the exception of Britain, the trend in most Northern, Western and Eastern European countries for which data is available has been one of relatively sharp decline throughout the 1980s and a continual but markedly slower decline throughout the 1990s.

The overall pattern in teenage pregnancies in Britain however, has followed the pattern similar to that described earlier for live births. Throughout the early 1970s there was a decline in the overall pregnancy rate to women aged 15-19 and throughout the 1980s the rate fluctuated between 40-45 per 1000. During the early 1990s the overall pregnancy rate amongst teenagers witnessed a small rise averaging around 45-50 per 1000 women aged 15-19 and since then the rate has slowly declined to the rates witnessed throughout the 1980s (Bury 1984; UN Demographics 1981, 1982, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1996, 1997, 1998; ISD Scotland 1997,1998, 2000).

Abortion ratio

The issue of teenage pregnancy is often misconstrued within literature as an issue

of unwanted and unplanned pregnancies. As has become apparent in recent years however, some teenage pregnancies (especially amongst 18-19 year olds) are in fact intended and where they are unplanned, it is not always the case that they are unwanted. The area of concern should therefore lie with those pregnancies that are unintended, unplanned and subsequently unwanted. When this occurs a young woman is faced with a number of options; continuing with the pregnancy and either keeping the child or placing the child up for adoption, or aborting the pregnancy.

The option to abort a pregnancy is not universal across Europe. Each country has its own laws regarding the conditions under which it is possible to obtain an abortion and variation in these laws will impact upon the abortion rate for young women in each respective country. As can be see in Table 1.3 below, throughout Europe there are four main categories under which abortion laws fall.

Definitions for the four categories have been described by Ketting (1993:4) as follows:

On request: women have a legal right to decide on the termination of pregnancy. In most cases this right only applies to the first three months of pregnancy, although there are notable exceptions (like Sweden and the Netherlands).

Rather broad: abortion is permitted for medical as well as socio-medical or social reasons. These reasons may include low income, poor housing, young or old age, and having a certain number of children.

Rather strict: only some narrowly defined circumstances justify performing an abortion. Specified grounds are often a threat to the woman's physical or mental health, foetal defects and legal indications (rape or incest).

Very strict: abortion is not allowed on any grounds or only if the pregnancy poses an immediate threat to a woman's life.

Table 1.3

European countries by current type of abortion law

1 On request		2 Rather Broad	3 Rather Strict	4 Very Strict
Norway	Czech Republic	Finland	Poland	Republic of
Sweden	Slovak Republic	Iceland	Portugal	Ireland
Denmark	Former Yugoslavia	UK (except	Spain	Northern Ireland
Netherlands	Romania	N. Ireland)	Switzerland	Malta
Belgium	Bulgaria	Luxembourg		
Germany	Albania	Hungary		
France	Greece	Cyprus		
Italy	Turkey			
Austria	Former USSR			

(Source: Ketting 1993: 4).

In the majority of European countries, laws regarding abortion fall under one of the first two categories although four countries have rather strict and three very strict laws. On the whole, the trend across Europe has been towards more liberal legislation (Kane & Wellings 1999). The move towards a more liberal level of abortion legislation in Spain, Portugal, Greece, Turkey, Romania, Albania, Belgium and the Slovak and Czech Republics occurred between the mid-1980s and 1990s (Ketting 1993).

The availability of abortion however does not always guarantee that one can be obtained, particularly in the case of young women. Across Europe the age at which a young woman can obtain an abortion and whether parental consent is required to do so, have major implications for the reality of abortion for many young women. In Austria for example, a young woman does not need parental consent from the age of 14 onwards, in Scotland, England and Wales and Switzerland the age is 16 and for Italy, France and Denmark it is 18. Due to the fact that many young women do not wish their parents to know of their pregnancy status, this places both the young women and their service providers in a difficult situation (Ketting 1993).

Since the 1970s the growing numbers of young women whose pregnancies have resulted in abortion have been in Northern and Western rather than Southern and Eastern European countries (Kosunen 1996). In addition to the laws regarding the availability of abortion, the changes in the proportion of young women across Europe who opt for abortion rather than birth are undoubtedly connected to a country's social and cultural acceptance of both abortion and childbearing in teenage years (Turner 2000).

Associated Factors

Research has further highlighted that in addition to those factors noted above, high teenage birth rates have been associated with social and economic factors (Jones et al. 1985, 1986; Selman 1998; SEU 1999; Turner 2000). In particular strong relationships exist between both higher levels of poverty and inequality, lower

levels of educational achievement and aspiration, and higher rates of pregnancy and births to young women under twenty.

The low rate of births to young women in the Netherlands, for example, has long been attributed to more open attitudes to sex and sexuality in society and the ease of access that young people have to sexual health services targeted at young people. However, Kirby (1997b) argues that other factors also play a role. In particular he notes that the Netherlands may experience a lower birth rate than Britain due to the fact that its society is more homogenous and consistently a more middle class society.

Economic Factors

The association between socio-economic background and teenage pregnancy has long been established, (Moore and Rosenthal 1993; Smith 1993; Hadley 1998) with socio-economic status, poverty and inequality all suggested to be important predictors of teenage pregnancy (Kirby 1997b). The association between deprivation, poverty and teenage pregnancy has, however, long been established as having occurred as result of pregnancy. Whereby, becoming a parent[1] at a young age has resulted in young women being unable to finish their education and therefore, being faced with a lack of employment opportunities which in turn, would mean a life reliant on welfare, resulting in a life of poverty for her and her child (Rhode & Lawson 1993).

[1] It is important to remember however that a live birth is only one potential outcome of a pregnancy; little research has thus far explored the potential negative effects on a young woman's educational continuation after an abortion.

However, while it is indisputable that large proportions of teenage mothers are faced with financial hardship, the conventional analysis of this association has been called into question in recent years as it has become more apparent, that often, poverty exists prior to pregnancy and that many young women have dropped out of education[1] prior to pregnancy, not because of it (Phoenix 1991; Kirby et al. 1994; Moore et al. 1995; Selman 1998; Turner 2000; Selman 2001 et al.).

In order to explore the relationship between poverty, deprivation and teenage pregnancy further, Kane & Wellings (1999) correlated two measures of a country's absolute wealth, Gross Domestic Product (GDP) and the United Nations Human development Index (UNHDI)[1] with teenage fertility. They found that both measures indicated strong inverse relationships with teenage motherhood, with correlation coefficients of –0.77 for economic development (GDP) and live births per 1000 women aged 15-19 (1996) and –0.62 for economic development (UNHDI) and live births per 1000 women aged 15-19 (1996).

One of the largest international studies on teenage pregnancy to date was that undertaken on behalf of the Alan Guttmacher Institute by Jones et al. (1985, 1986). This particular research explored the phenomenon of teenage pregnancy in 37 industrialised countries worldwide (with particular focus on five countries thought to be culturally similar to the USA), with the intention of highlighting relevant policy implications for the USA. Jones et al. (1985, 1986) concluded that low teenage fertility rates were found in countries where there were high levels of socio-economic modernization and where a relatively large proportion of

[1] Issues relating to educational achievement and aspiration are further explored later in this chapter.

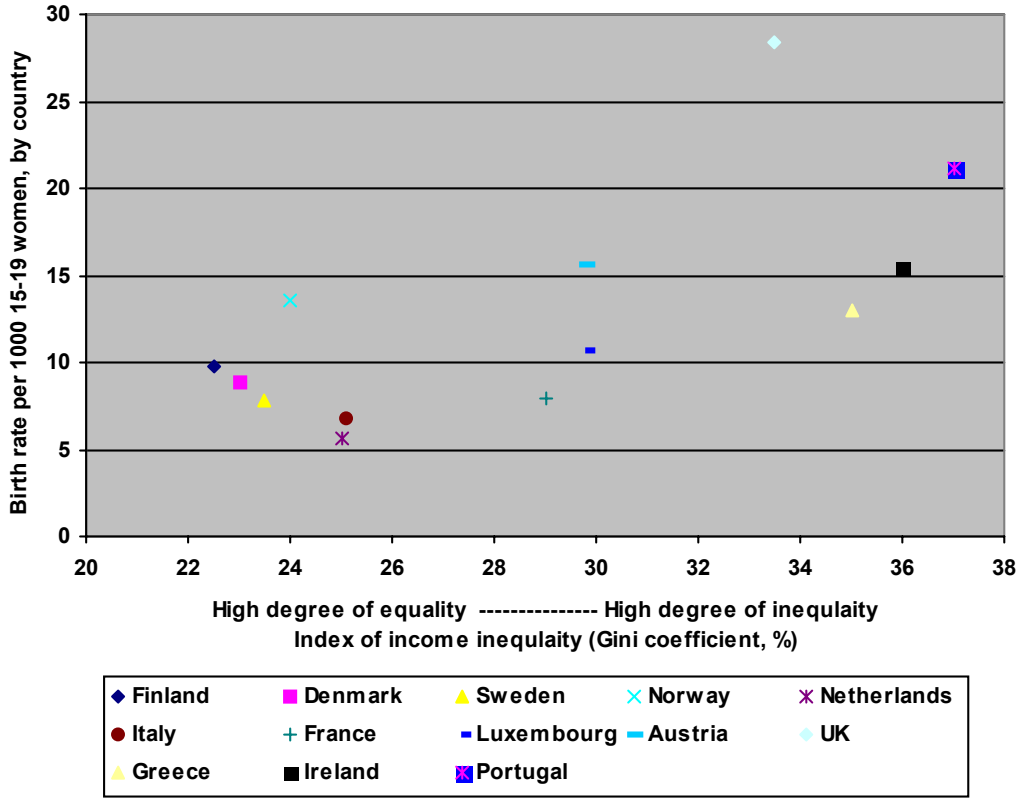
household income distributed to the low-income population (as well as those more open about sex).

Selman (1998) further explored the relationship between a country's economic development and teenage birth rates by using a measure of income distribution. He argued that using a crude measure of economic development such as GDP can provide an inaccurate picture of wealth in relation to teenage pregnancy because countries such as the USA and the UK, whilst both wealthy nations, have poor income distribution between the richest and poorest members of society (Selman 1998).

Therefore, using the gini coefficient as a measure of the percentage of all household income received by the poorest 20 percent of all households as an indication of relative poverty, Figure 1.2 below indicates that a strong positive relationship ($r_s = 0.65$) exists between countries with higher income equality and lower teenage birth rates.

[1] Since 1990, the UNHDP has incorporated national indicators of health, education and income (Kane & Wellings 1999).

Figure 1.2 – Comparison of Income inequality and teenage birth rates, by country, 1994 or latest available year.



$r_s = 0.65$

Sources: Selman 1998; UN demographic yearbook 1995.

Employment

The actual and perceived availability of employment opportunities for young people may impact upon the choices they make regarding their lives, and Kane & Wellings (1999) argue, therefore, that this may have consequences for fertility rates. Using two indicators of economic prospects: the proportion of all women over the age of 15 in paid work and the employment situation for young people aged under 25, Kane & Wellings (1999) explored the potential relationship between employment and teenage fertility rates.

They found that although considerable difference was visible across countries in

Europe, there was not a very strong correlation found between: the percentage of women in paid work over the age of 15 and teenage birth rates (0.23), nor the rates of teenage economic activity and teenage birth rates (-0.13) for 1991. Repeated correlations for 1996, by which point in time most European countries had suffered some degree of economic recession and an increase in the rate of unemployment, revealed that although the correlations were still relatively weak they had strengthened notably: $r_s = -0.40$ (15-24 employment male and female) and $r_s = 0.30$ (% of women in paid work aged 15+)[1].

Kane & Wellings (1999) did, however, find a strong positive relationship (0.71) between the percentage of women in paid work over the age of 15 and the rate of abortions to women aged under 20, which may suggest that where employment prospects are good for young women, once pregnant, a young woman is more likely to terminate her pregnancy. By 1996 this correlation had weakened, although remained significant at $r_s = 0.51$[2].

Caution must be exercised with regard to all of the above correlations, however, due to the fact that the definition of an 'unemployed' person will vary from country to country and in particular for this age group.

Education

The actual and perceived ability to continue in education beyond the age of sixteen

[1] Source for data on employment figures was European Commission 2001 and as a result of no separate figures for Scotland alone, UK figures are used for Scotland throughout; source for birth data was Singh & Darroch 2000.
[2] Source for data on employment figures was European Commission 2001; source for abortion data was Singh & Darroch 2000.

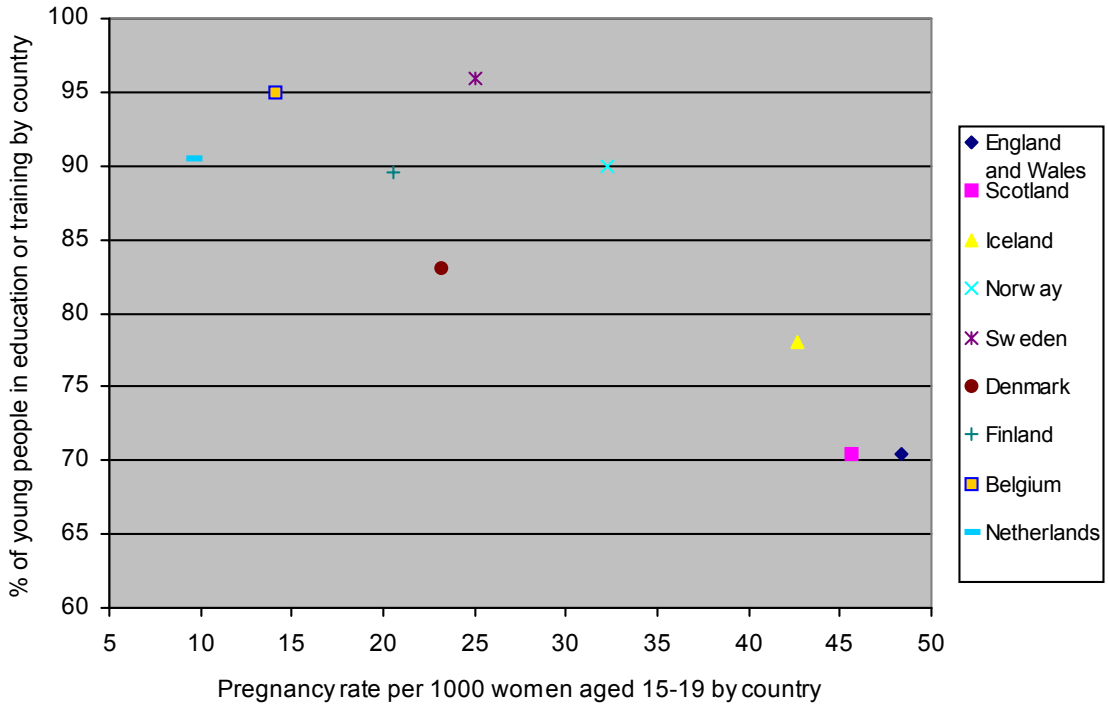
may also impact upon the choices they make regarding their lives[1]. Some potential ways in which this could impact would be where; increased opportunity in continued education, a strong normative expectation to continue in education or high unemployment rates amongst young people would encourage more young people to remain in education and hence indirectly delay parenting at a young age.

In order to explore some of these potential relationships further, noting that the average age at which compulsory schooling ends in Europe is 16, the proportion of young people aged 16-18 in education or training has been used as a measure of educational aspiration. Although there was a significant relationship found between a high proportion of young people remaining in training or education aged 16-18 and a low rate of teenage pregnancy[2] amongst 15-19 year old women in a number of European countries (r_s= 0.73) as can be seen in Figure 1.3 below, high continuation in education was not found, as one have might expected, to be significantly related to high rates of youth unemployment (aged 15-25) (r_s = 0.26) or high rates of unemployment amongst young women aged 15-24 (r_s = 0.26) across Europe as a whole[3].

[1] The relationship between education and teenage pregnancy is discussed further in-depth in the review of literature in Chapter Two.
[2] In order to gain an approximate idea of pregnancy rates amongst young women, proxy rates have been obtained by combining live birth and abortion rates for a selection of European countries where both data sets were available.
[3] Source for data on unemployment figures was European Commission 2001. Source for % of young people in education or training data and teenage birth data as in Figure 1.3.

Figure 1.3

15-19 year old pregnancy rate and percentage of those aged 16-18 in education or training, by country in 1996 (or latest available year).



r_s= 0.73

General notes
Abortion data from Singh & Darroch 2000, Abortion data for Scotland from ISD Scotland 2000. Birth data from UN Demographic Yearbooks 1997,1998, Birth data for Scotland from ISD Scotland 2000. Year is 1996 for birth and abortion data unless noted: 1998 birth and abortion data – Scotland, 1995 birth rate - Denmark and Norway, 1995 abortion rate England and Wales and Belgium, 1992 birth and abortion data - Netherlands. Data for Scotland and the Netherlands - birth & abortion data are for women younger than 20. % of young people in education or training data - EUROSTAT 1998-99. Year for % of young people in education data is for 1996.
Data on Scotland and England and Wales - % education and training rates are for the UK as a whole.

Welfare Expenditure

The notion that young women become pregnant deliberately due to 'perverse welfare incentives' was a popular notion in both the USA and Britain during the Conservative eras of Reign and Thatcher respectively (Selman 2002 (forthcoming)). The suggestion that young women perceive welfare benefits as a financial incentive to conceive and continue a pregnancy to birth has, however,

been called into question by many researchers, as little evidence exists from European data to suggest that welfare provisions act as a perverse incentive to conceive (Selman & Glendinning 1996, Allen et al. 1998; Selman 1998; Kane & Wellings 1999; SEU 1999; Selman 2002 (forthcoming)).

In particular, Selman & Glendinning (1996) found that there was no evidence that apparent welfare and housing policy 'incentives' in the USA or England and Wales had encouraged young women to become pregnant deliberately. They concluded that only improvements in educational and employment opportunities were likely to have an effect upon contraceptive motivation, or motivation to terminate a pregnancy and that "any backlash against sex education, contraception and abortion services, or against social security and housing provisions for young parents are likely to have the reverse effect" (Selman & Glendinning 1996:216).

More recently Selman (2002 (forthcoming)) has argued that if the welfare incentive myth were to hold any credence, one would expect to find high rates of pregnancy and births to teenagers in countries with more generous welfare benefits such as Sweden and Finland. However, the reality is in fact the opposite, with those countries having relatively low pregnancy rates in European terms and of those who do become pregnant in the younger teenage years (under 17), abortion is by far the more likely outcome.

It is of further importance to note that in some countries, such as Scotland, England and Wales, (where the 'welfare myth' is strongest (Selman 1998; 2002 (fortcoming))), it is highly improbable that welfare benefits act as an incentive for

those aged under 16 (the group with which both England and Scottish governments are most currently concerned), because young women under the age of 16 are not entitled to any welfare benefits other than a minimal weekly child allowance which must be claimed via the young mother's own mother.

Causes of teenage pregnancy

In order to become pregnant a young woman must first be fertile, second have had sexual intercourse[1] and finally together with her partner, have failed in the use of contraception. This could be due to a failure to use contraception at all, failure to use it effectively or failure of the contraceptive itself. Therefore, in order to attempt to understand the trends in teenage pregnancy, it is first important to consider all of these factors.

Teenage fertility

Over the last century the age of menarche in most developed countries has decreased by approximately 0.2 years per decade, levelling off at twelve to thirteen years of age by the mid 1960s (Hofmann 1984). As a young woman reaches the stage of menarche and matures earlier, she therefore becomes fertile at an earlier age. Although there is often a delay between the age at which a girl reaches menarche and the age at which she becomes fertile it has been calculated that by the age of seventeen and a half, only 13.5% of women were biologically able to conceive a century ago. That figure now is believed to be 94%, as the age of

[1] Pregnancy can obviously occur through medical treatments that remove the need for sexual intercourse to have taken place, but these treatments are for infertility problems and not likely to be available or offered to teenagers. Additionally pregnancy could theoretically occur as a result of digital intercourse, where sperm having already been released from the male is then inserted into the young woman via a finger/hand. However the risks are limited due to the small amount of time that sperm can remain active once outside of the male body.

menarche has lowered on average by a total of four years over the same time period (Rauh et al. 1975). This gradually declining trend in the age of menarche is believed to be due in the main part to improved nutrition (Bury 1984).

The lowering of the age of menarche is associated with the earlier development of sexual awareness and feelings. The effect that this has had on the level of teenage pregnancy however, has been heavily contested (For example see: Bullough 1981; Cutwright 1972; Short 1978.). Rauh et al. (1975) have argued for example that it may account for as many as 50% of the increase in teenage pregnancies up to 1970.

Coital Activity

A study by the UN of coital activity across many European countries revealed that the age of first intercourse for women was in general decreasing by the mid-1980s. The proportion of women under 20 who were engaging in sexual intercourse[1] was steadily increasing compared with cohorts of previous generations (UN 1988a). For cohorts born after 1950[2] there was an increase in the proportion of women who had had first intercourse by the age of seventeen, the most noted decline of age at first intercourse therefore occurring during the late 1960s and early 1970s.

Reasons for this trend of lowered age at first sexual intercourse have been attributed to both biological (age of menarche) and social factors. For the first half

[1] Reference is made throughout this thesis to sexual intercourse and activity. This should be taken, unless otherwise noted, in every case to mean 'heterosexual'.
[2] This issue should however be viewed with caution as no data was available with regard to the age of first intercourse prior to the 1950s cohort and therefore no direct conclusions can be drawn about pre-1950s cohorts.

of this century the explanation leant towards the biological explanation. Since the age of menarche levelled off during the mid-1960s, however, the emphasis for the latter half of the century has been on social factors (Bury 1984).

Friedman and Phillips (1981) found that many young people, women in particular were engaging in sexual relations for non-sexual reasons. These included perceived enhancement of acceptance by peers, poor self-confidence, equation of sexual activity with general acceptance and often 'love'. In addition to this, research in recent years has highlighted the fact that many young women gain little if any pleasure from their first and subsequent sexual experiences (Thompson 1990) and often regret having had sexual intercourse before age 16 (Dickson et al. 1998; Wight et al. 2000).

Schofield's study in Britain found that although three quarters of young men enjoyed their first experience, only half of young women could say the same (1968). Part of this lack of pleasure is suspected to be because young women are unrealistic in what to expect, and are not prepared emotionally for what happens (Thompson 1990).

More recently Wight et al. (2000:1243) in their study of 14 and 15 year olds in Scotland found that of the 18% of young men and 15.4% of young women who reported having had sexual intercourse by age 14, a fifth of young women said they felt pressured at first (19.8%) and most recent intercourse (18.1%), compared to 7.0% and 9.1% respectively for young men. 32% of young women and 27% of

young men reported that they felt they had had sex too young and 13% of young women and 5% of young men felt that the intercourse should never have happened (Wight et al. 2000:1243).

From Wight et al.'s (2000) sample, a young man having exerted pressure on his partner was the only variable associated with regret amongst young men. For young women however, regret was associated with exerting pressure on a partner, having been pressured by a partner, having unplanned intercourse with a partner and relatively high levels of parental monitoring (Wight et al. 2000).

Data on the rate of sexual activity and age of first intercourse amongst young men and women is not readily available in many countries. Two international studies have been conducted however, one by the Alan Guttmacher Institute (Jones et al. 1985) and the other a UN report (UN 1988a). Amongst these findings was that in most developed nations the age of first intercourse was more or less the same, averaging at 17 years, with the exception of Scandinavian countries where the age of first intercourse was on average a year lower. A more recent study by Wellings et al. (1994) however, has suggested that the differences between the age of initiation for young British and Scandinavian women is disappearing.

One must be wary of these findings however, as it is quite possible that young people are not entirely truthful about their sexual experience, with young men over-exaggerating what they have done and young women underreporting. This may be especially true in countries where double standards still exist with regards to sexual behaviour and gender and this may go some way to explaining why

Scandinavian countries, who have reached a high degree of gender equality in all areas of life, apparently have a lower age of initiation (i.e. there is less stigma, especially for young women, in admitting their true age of first intercourse).

More recent smaller-scale qualitative studies such as Silver's (1998) which compared the effectiveness of sex education in England and the Netherlands found that the average age of first intercourse for both young men and women was fifteen, two to two and half years below each country's respective 'national average'.

Although some research has highlighted that a certain proportion of young women continue to have regular intercourse after their first intercourse such as is the case in Sweden (Invarsson & Lindquist 1987), for the most part, young women do not generally have a regular sex life immediately after their first intercourse. Wilkins et al. (1981) after reviewing available literature on this subject found that approximately 50% of young women who had had their first intercourse were not continuing to have sexual intercourse on a regular basis and that most sexual activity in younger years is infrequent, unplanned and sporadic.

Contraceptive use

It has been argued that at first the rise in sexual activity in European countries was not accompanied by an increased usage of contraception by teenagers and hence the pregnancy rates witnessed a rise (Bury 1984). The fall in teenage pregnancy rates among 15-19 year old women since 1970 therefore, have been attributed in part to the increased availability and greater use of contraception by teenagers

(Thompson 1976; Yarrow 1978; Hansard 1983).

Amongst younger teenagers, use of contraception at first intercourse has never been particularly high. Studies from Europe have shown that a significant proportion of young people used no effective method of contraception at first intercourse (UN 1988a). The relationship between age and likelihood of contraception being used at first intercourse has been established in that the younger the individual, the less likely they are to use any reliable method of contraception (Morrison 1985; UN 1988a).

During the mid-1980s, the world entered a phase of sexual health crisis with the discovery of a sexually transmittable virus, HIV, that was believed to be the cause of AIDS. Rigorous advertising campaigns were launched in many countries, worldwide, in an attempt to encourage effective use of condoms to halt the spread of HIV. Prior to the arrival of HIV, condoms had already been established as the preferred choice of contraception by young people at first intercourse in many countries (Kosunen 1996). This is likely to have occurred due to the relative ease of (non-medicalised) access to condoms compared to other methods of (medicalised) contraception. Additionally it may also be due to the 'unpreparedness' for sexual activity that the condom represents in comparison with 'being on the pill' prior to the commencement of sexual activity.

The fact that the use of oral contraceptives (a sign of preparedness) is more common amongst younger teens in the Netherlands and Scandinavian countries raises an interesting issue (Kosunen 1996; Silver 1998). It has been suggested that

gender equality and openness regarding sexuality in general culture play an important role here (Silver 1998). Young women in Britain for example receive many confusing messages regarding sex, most commonly from the media, where sex is used to sell everything from newspapers to cars[1] (Hadley 1998; HEA 1998). The resulting effect of these confusing messages is that young women are still made to feel that while they should be 'sexually attractive' they should also be 'sexually innocent' and that a good sexual 'reputation' is a very high priority (Lawson & Rhode 1993; Lees 1994; HEA 1998). Therefore if young women are using oral contraceptives before initiating sexual relations, they are seen to be prepared, which is often translated due to double standards as 'promiscuous' (HEA 1998).

Research has also shown that young women in Britain are often not in control of their sexual relationships as a result of a power imbalance in those relationships (Holland et al. 1993; Lawson & Rhode 1993; Lees 1994; Holland et al. 1998; Silver 1998). Often young women who are aware of the risks they take in not using condoms (STIs, HIV as well as pregnancy) will not use them because their boyfriends 'do not like them', therefore putting their boyfriends' pleasure before their safety (Silver 1998; SEU 1999). This 'dominant male' syndrome is typical of many relationships that young women have in Britain (Holland et al. 1998) and is an example of how sexual health messages fail to be internalised and illustrates that knowledge of sexual health is not always enough to alter behavioural patterns (Silver 1998).

[1] It is worth noting that such media presentations are also found in other countries. However, in the Netherlands for example, these messages are balanced with more positive media presentations of sex and sexuality, which are not present in Britain.

In contrast Papp (1997) notes that in countries with higher social and economic gender equality, there has been a move from the 'double' standard to a single-sex standard whereby women have gained more equality in sexual rights in comparison to their male counterparts. This process has occurred and is particularly strongly expressed with Nordic countries (Weinberg et al. 1995; Sprecher & Hatfield 1996; Bozon & Kontula 1998) and the Netherlands (Silver 1998).

Usage of oral contraceptives at first intercourse appears to vary greatly across Europe with the highest use occurring in Scandinavian countries and the Netherlands (UN 1988a; Jarlbro & Persson 1990; Kraft et al. 1990; Wielandt 1993; Kosunen 1996). As was the case with condom usage however, the likelihood of a young woman using oral contraceptives at the time of her first intercourse is lower, the younger the woman (Mosher & McNally 1991).

Although younger people are less likely to use any method of contraception at first intercourse, as young women grow older, their sexual relationships become less sporadic and contraceptively unprepared. The trend in contraceptive use then moves from using no protection or a barrier method (e.g. a condom) to a more reliable prescribed method (the pill) (UN 1988a; Kosunen 1996).

Having examined the trends in pregnancy, birth and abortion rates, sexual and contraceptive coital and contraceptive behaviour of teenagers across Europe and possible reasons for those trends, the remainder of this chapter examines in more detail the national data available for both Scotland and Finland.

Finnish National Trends

In this section of the chapter teenage pregnancy and associated rates for the years 1980 to 1999 will be discussed in order to compare the trends between Finland and Scotland, remembering however, that direct comparisons cannot be made as the available data represent different age groupings.

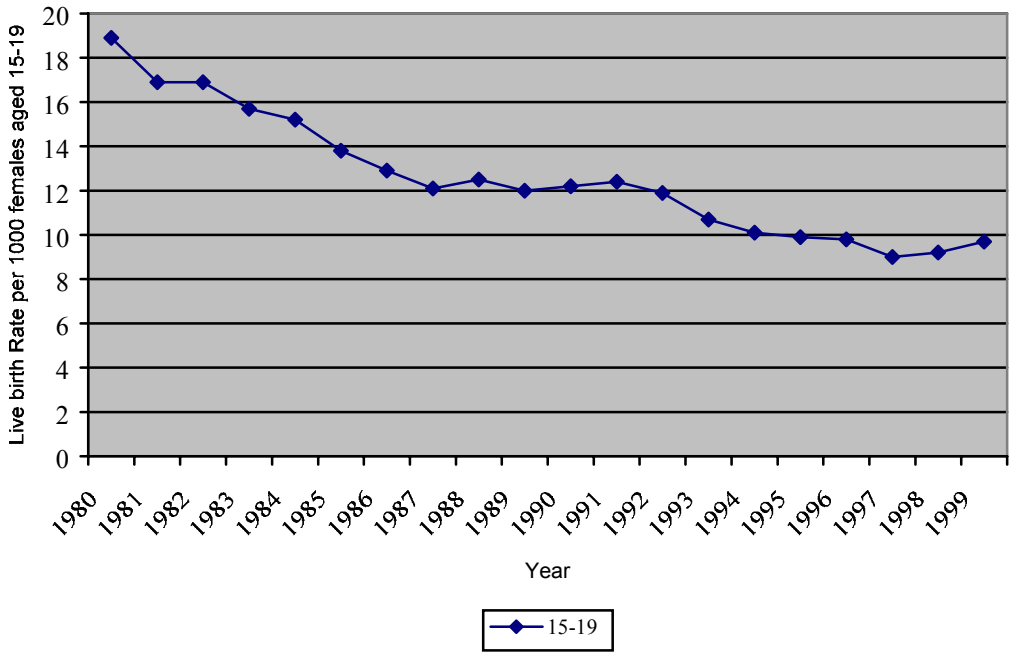
Live Birth Rate

At the point when this research began in 1996, Finland was one European country, which had a continually declining teenage (15-19 year old) birth rate from the early 1970s. As can be seen in Figure 1.4[1] below, the live birth rate for this age group steadily declined throughout the 1980s and 1990s from 18.9 per 1000 women aged 15-19 in 1980 to 9.0 per 1000 in 1997. The only temporary halt in the decline occurred between 1987 and 1990 when the rate fluctuated between a low of 11.8 per 1000 and 12.4 per 1000 (Gissler 1999). Since 1997, however, there has been a rise in the rate of live birth from 9.0 per 1000 in 1997 to 9.7 per 1000 in 1999 (STAKES – personal communication 2000).

[1] Data for this figure can be found in Appendix i.

Figure 1.4

Live birth rate per 1000 Finnish women aged 15-19, 1980-1999



Source: Gissler 1999; STAKES 2000 (Personal communication).

Abortion Rate

Prior to 1950, abortion in Finland was illegal except on medical grounds. Between 1950 and 1970 the law was liberalised to allow abortions on the grounds of medical, medical-social, ethical (rape or incest) and eugenic indications (Rehnström 1997). As the decision on whether to abort was left up to individual doctors and as many charged large fees, this in effect meant that the availability of abortion was not uniform throughout Finland and large numbers of illegal abortions continued to be performed (Hämäläinen et al. 1995).

In 1970 the law was further liberalised and placed a particular priority for those aged under 17 at the time of conception. As a result, the number of legal terminations rose rapidly throughout the early 1970s. Since 1973 the abortion rate

has declined steadily for all age groups including those aged 15 to 19 (Gissler 1999). Figure 1.5[1] below shows this continually declining trend from 19.4 per 1000 females aged 15-19 in 1980 to 10.5 per 1000 in 1994. A marginal rise was witnessed between 1985 (16.5 per 1000) and 1987 (17.6 per 1000) and a more dramatic rise has occurred more recently from 10.5 per 1000 in 1994 to 13.5 per 1000 in 1999 (Gissler 1999; STAKES – personal communication 2000).

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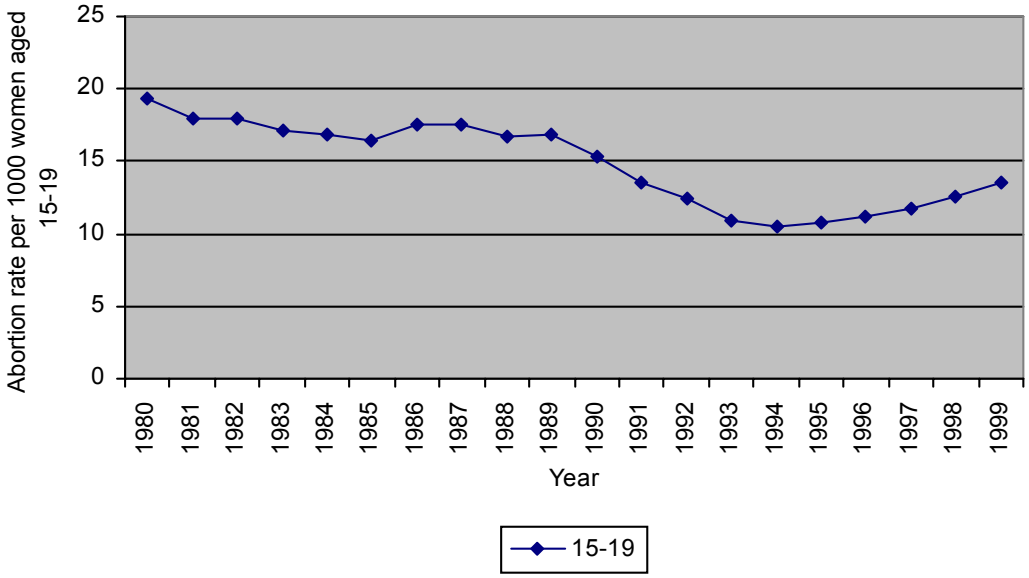
Abortions to Finnish teenagers in addition to having decreased significantly over the time scale shown, have also decreased in terms of their share of abortions compared with other age groups. In the early 1970s teenage abortions accounted for 25% of all abortions performed to women aged 15-49, compared to 15% in 1996 (Kosunen 1996).

Figure 1.5

Abortion rate per 1000 women aged 15-19 in Finland, 1980-1999.



Sources: Gissler et al. 1996; Gissler 1999; STAKES 2000 (Personal communication).

[1] Data for this figure can be found in Appendix i.

Pregnancy Rate

Teenage pregnancy has never been a source of moral panic in Finland (Rehnström 1997). Since the mid-1970s the number of pregnancies to women aged 15-19 has more than halved in size. As a whole in 1994 only 2.6% of births to women aged 15-49 were to women under the age of 20 and of those, 80% were to women aged 18-19 (Rehnström 1997:11).

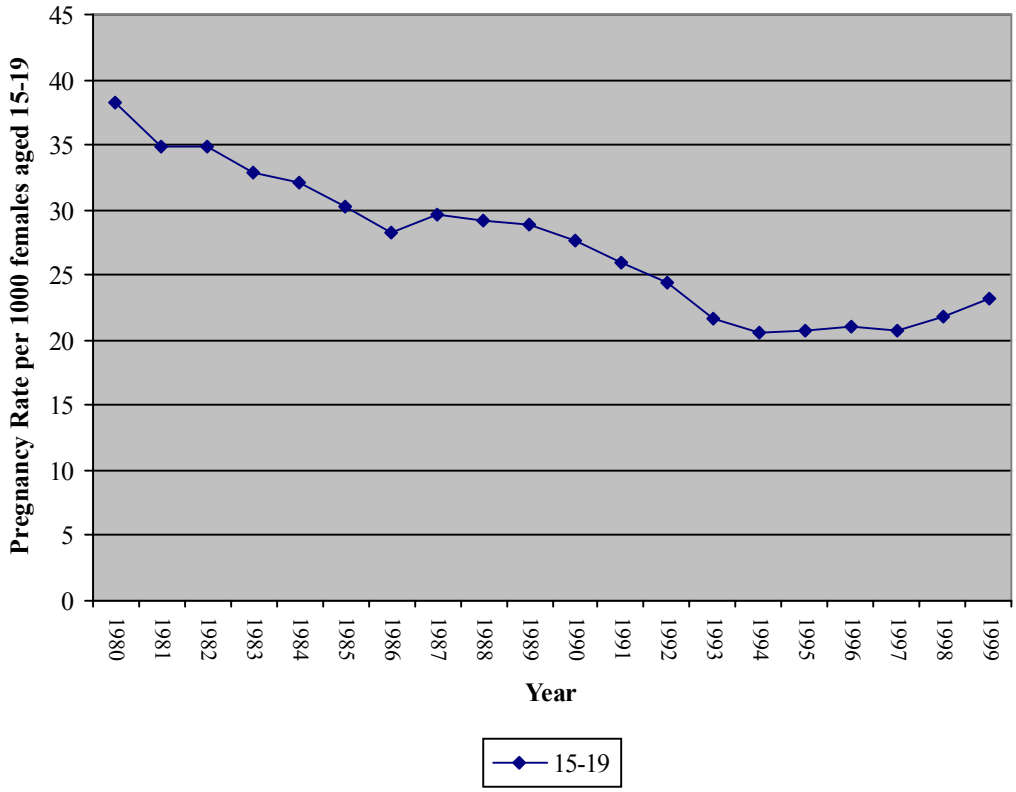
The overall decline in the teenage pregnancy rate to women aged 15-19 has been steady throughout the last two decades until 1995 (see Figure 1.6[1] below). A marginal rise was witnessed from 28.3 per 1000 in 1986 to 29.7 per 1000 in 1987. Since 1995 however, the pregnancy rate has witnessed an overall rise once again from 20.6 per 1000 in 1994 to 23.2 per 1000 in 1999 (Gissler 1999; STAKES – personal communication 2000).

As stated previously, data on those aged under-16 is not widely available in Finland. Between 1981-82 and 1989, however, the live birth rate for 14 year olds is known to have declined from 0.18 per 1000 females aged 14 to 0.03 per 1000 (Kosunen 1996). Additionally, in relation to those aged 15, it has been acknowledged that the pregnancy rate has remained relatively steady fluctuating between 3 and 5 per 1000 young woman aged 15 per year, since 1976. For 16 year olds, the overall pregnancy rate dropped throughout the 1970s and has remained since the mid-1980s at a constant of 10 per 1000 (Kosunen 1993b).

[1] Data for this figure can be found in Appendix i.

Figure 1.6

Teenage pregnancy rate per 1000 women aged 15-19, 1980-1999



Sources: Gissler et al. 1996; Gissler 1999; STAKES 2000 (Personal communication).

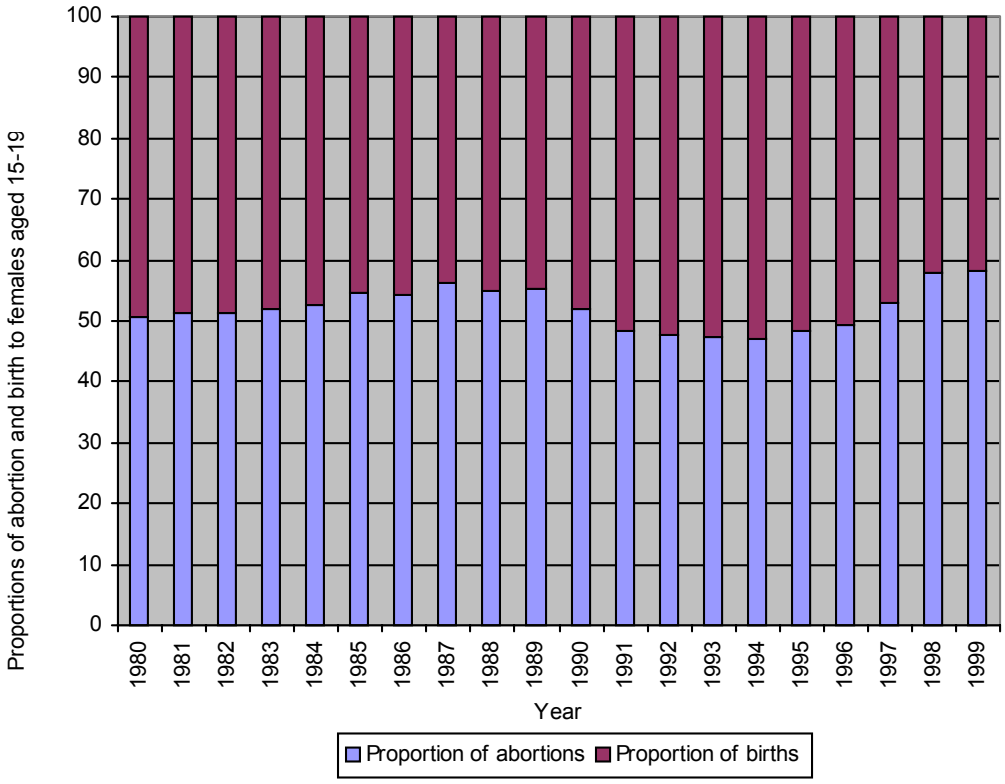
Abortion Ratio

The pattern in most Northern European countries, Finland included, with regard to abortion ratio tends to be the classic U-shape, whereby the abortion ratio is highest amongst those women over 35 and under 20. Although not much is known about the youngest age groups in Finland, it has been established that almost 100% of those aged 15 and 70-80% of those aged 16 who become pregnant, opt for an abortion rather than to give birth (Kosunen 1993b). The proportion for young women as a whole aged 15-19 can be seen in Figure 1.7[1] below.

[1] Data for this figure can be found in Appendix i.

Figure 1.7

Abortions and births as a proportion of total pregnancies to young women aged 15-19, 1980-1999.



Sources: Gissler et al. 1996; Gissler 1999; STAKES 2000 (Personal communication).

This pattern shows the beginning of an interesting change in the outcome of pregnancy amongst 15-19 year old Finnish women. Given that the proportion of those who abort is very high amongst 15 and 16 year olds (Kosunen 1993b), it is likely therefore that the majority of change is occurring amongst older teenagers. The trend from the beginning of the 1980s where the proportion of abortions was only marginally higher than the proportion of births has been one of decreasing proportions of births to abortions.

From 1991, the trend changed direction whereby it became more common for older Finnish teenagers throughout the early 1990s to give birth as opposed to aborting their pregnancy. The proportion however has now reversed quite dramatically, with the difference between the two outcomes in 1999 being the largest over the 20-year period (41.8% birth – 58.2% abortion).

Associated Factors

Socio-Economic Factors

Whilst social class has arguably been a key feature in the structuring of life opportunities in Finland, class is less significant a factor due to a high prevalence of smaller scale employment contexts (Furlong et al. 1998) and the post war political agenda aimed at the promotion of equality (Sinisalo 1993).

In relation to teenage pregnancy and teenage motherhood, a recent study into the potential impact of socio-economic status has revealed that considerable differences were found in teenage pregnancy risk in relation to a young woman's father's socio-economic status. The study revealed that young women who came from lower socio-economic backgrounds were at a higher risk of pregnancy during teenage years (Vikat et al. 2001).

Over the time period of 1987 and 1998, however, there were found to be no changes in the socio-economic differentials and the study revealed that the factors that were believed to influence teenage pregnancy risk had impacted similarly across all socio-economic groups and therefore the conclusion to this study was that the changes in socio-economic structure could not account for the levelling-off

in the reducing trend in the rate of pregnancy amongst 15-19 year olds (Vikat et al. 2001).

Employment

In relation to how the employment rate of women aged 15 and over potentially relates to the trends in births to women aged 15-19 in Finland, correlations were found to differ from that found by Kane & Wellings (1999) for Europe as a whole. In other words, over the time period 1991-1998, a correlation (although a weak one) was found between higher (rather than lower) birth rates amongst women aged 15-19 and higher economic activity of women aged 15 and over ($r_s = 0.43$)[1]. However in relation to abortion rates, Finland did fit the general pattern found by Kane & Wellings (1999), with a perfect correlation between higher rates of abortion to women aged 15-19 and higher economic activity of women aged 15 and over ($r_s = 1.0$[2]), suggesting that during times of economic prosperity, young women in Finland are more likely to view continuing a pregnancy to term as a hindrance to their potential in the labour market.

Education

The transition from school to work in Finland has for some time been a prolonged experience with a consistently high proportion (90% +) of young people remaining in some form of education beyond the age of 16 for at least two-three years, as well as the fact that university education in Finland (undertaken by approximately 50% of the cohort) can take seven years to complete (Roberts 1997).

[1] Source for data on employment figures was European Commission 2001, source for birth data was Singh & Darroch 2000.
[2] Source for data on employment figures was European Commission 2001, source for abortion data was Singh & Darroch 2000.

Although one may expect to be able to explain, at least in part, increasing rates of continuation in education as due to increased rates of youth unemployment (such as Finland has witnessed during the 1990s), the rate of continuation from the comprehensive school (11-16) to high or vocational school (16-19) has always been high in Finland, during periods of both higher and lower youth employment. This may suggest that there are other factors relating to the structure of the education system, or the normative value placed on education in Finland, which impact upon young people's willingness and ability to negotiate the transition to continued education, rather than attempt to enter the labour market directly from the lower comprehensive school.

Causes of Teenage Pregnancy

Coital Activity

The first major study of national sexual activity to be conducted in Finland took place in 1971. Although it only considered those aged 18 and above, it is possible to determine from that research the pattern of change in first intercourse and sexual activity at that point in history. The results showed that the median age of first intercourse had decreased from 20 years of age in 1930 to 18 years of age by the 1960s (Sievers et al. 1974).

A similar study was conducted in 1992 which revealed that the proportion of young women who had had first intercourse before the age of 16 had increased from 1% in 1971 to 23% in 1992. Over the same time period the proportion of young men had increased from 13% to 21% (Kosunen 1993a). The first national

study of teenage sexual activity in Finland took the format of a postal questionnaire in 1968, revealing that the proportions of young women and young men who had first had intercourse before age 15 were 4% and 6% respectively (Saviaho 1971).

The KISS[1] research study into teenage sexual behaviour began in 1986 and was repeated in 1988 and 1992. This particular study looked at a range of issues including, knowledge of sexual matters and sources of information, age of first intercourse, experience of couple and sexual relationships and contraceptive use. The first study revealed that by the 9th grade (15-16 years of age), 25% of young woman and 21% of young men had had intercourse (Kontula and Meriläinen 1988). The corresponding figures for 1988, 1990 and 1992 are shown below in Table 1.4.

Table 1.4

Proportions of young people who had experienced intercourse by age 15 in Finland.

Gender	1988*	1990**	1992*
Young men	31%	25%	19%
Young women	30%	29%	31%

Sources:
* Kiss Study (Kosunen 1993a)
** Health-behaviour in school aged children study (Pötsönen 1993)

Table 1.5 below reveals the level of sexual experience by age 15 of Finnish young

[1] KISS is the project name for a study into teenage sexual behaviour and it is an acronym from the Finnish words meaning maturation, human relationships, dating and sexual behaviour (Kosunen 1996).

men and women in 1992. The findings reveal that young women by age 15, have had on the whole marginally more types of sexual experience than young men except for masturbation. They had significantly more experience of sexual intercourse with only 19% of young men having had intercourse by age 15 compared to 31% of young women (Papp 1997).

Table 1.5

Sexual experience of Finnish schoolchildren by age 15 in 1992.

Sexual experiences	Young men%	Young women%
Kissing	69	78
Light Petting	61	67
Heavy petting	38	52
Sexual intercourse	19	30
Masturbation	59	40

Source: Papp 1997.

Contraception Use

From the first study conducted on sexual experience and young people (Leppo 1978), it was found that at first intercourse while 46% of young woman had used condoms, the remainder had relied on the withdrawal method or had used nothing at all (Leppo 1978).

Data from the KISS studies of 1986, 1988 and 1992 revealed on the whole an increase in the use of contraception by young people at first intercourse. The proportion using no method of contraception decreased in each study although more significantly between 1986 and 1988 than between 1988 and 1992 (Kosunen

1993a). The proportions who had ever-used the condom had also increased significantly between 1986 and 1992 (Kosunen 1993a). On the whole by 1992, the proportions of young people using no method of contraception had decreased in all groups of individuals, for those aged 15 the percentages had dropped from 28% (young men and young women) to 13% of young men and 20% of young women (Kosunen 1993a).

Despite the growing popularity of the condom amongst younger teenagers in Finland, it seems that as a young woman becomes older she is much more likely to adopt a more reliable method of contraception (Kosunen 1993a, 1996). Amongst older teenagers, the oral contraceptive is now the preferred method (Sihvo et al. 1995). The findings of Kosunen's study (1993b, 1996) into oral contraception use by Finnish teenagers also concluded that the increased use of oral contraceptives has perhaps reached close to 'saturation level'[1] for those in need of regular contraception.

The availability and use of emergency contraception is a factor associated with low incidence of teenage pregnancy in the Netherlands and has been suggested to be part of the reason why teenage pregnancy rates are also relatively low in Finland (Kosunen & Rimpelä 1996a). A recent study by Kosunen et al. (1999a, 1999b) using information from the National School Health Study, revealed that only 3% of those aged 15 and 1.5% of those aged 17 were unaware of emergency contraception. The proportion that had ever used emergency contraception increased according to age, ranging from 2.1% (aged 14-15) to 15.1% (aged 17)

[1] Saturation level is used within this context to mean that the contraceptive pill was being used by almost all regularly sexually active young women in need of contraception.

(Kosunen et al. 1999b). Of those who had used this method two thirds had used it only once, which Kosunen et al. (1999b) stated should alleviate fears that easy access to emergency contraception would result in it being used as a method of contraception in itself rather than as an emergency measure.

Scottish National Trends

In this section of the chapter, teenage pregnancy and associated rates for young women in Scotland from 1983-1998 will be explored. Since 1983 pregnancy, birth and abortion rates for teenagers in Scotland have been reported in the format of 13-15 year old and 16-19 year old year groupings (ISD Scotland 1997, 2000). Information prior to that year was reported in the format of a 15-19 year old year grouping and therefore it is not directly comparable to the later years and hence, has not been included.

Live Birth Rate

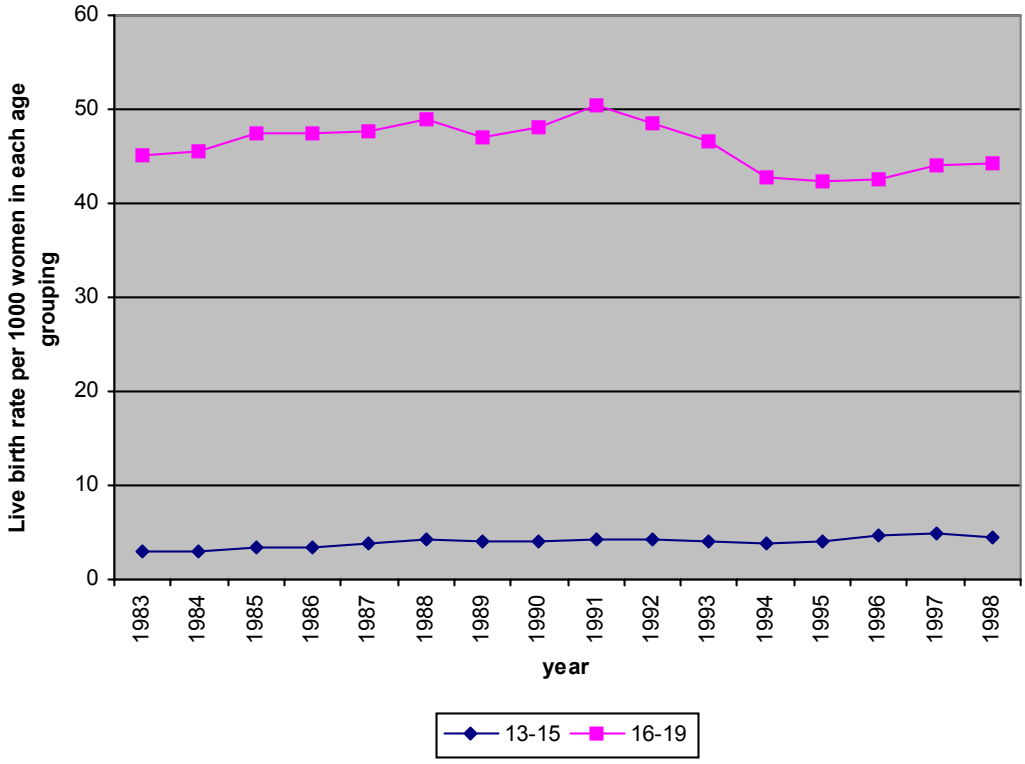
Between 1983 and 1998 the live birth rate to Scottish teenagers has changed relatively little overall. There are, however, some distinct differences in the trends between older and younger teenagers. As can be seen in Figure 1.8[1] below, since 1983, the birth rate for older teenagers rose steadily from 45.2 per 1000 to a peak of 50.4 per 1000 in 1991. Since then the trend on the whole has been one of steady decline to 42.6 per 1000 in 1996, although there was a slight rise to 44.0 per 1000 in 1997 and again in 1998 to 44.3 per 1000 (ISD Scotland 1997, 2000). Amongst younger teenagers the birth rate rose at a relatively steady rate from 3 per 1000 in 1983 to 4.9 per 1000 in 1997, with a small decline from that peak to 4.4 per 1000

[1] Data for this figure can be found in Appendix i.

in 1998 (ISD Scotland 1997, 2000). In 1998 of those births to teenagers 93.1% were to women aged 16-19.

Figure 1.8

Live Birth rates per 1000 Scottish women by age grouping, 1983 - 1998.



Source: ISD Scotland 1997, 2000.

Abortion Rate

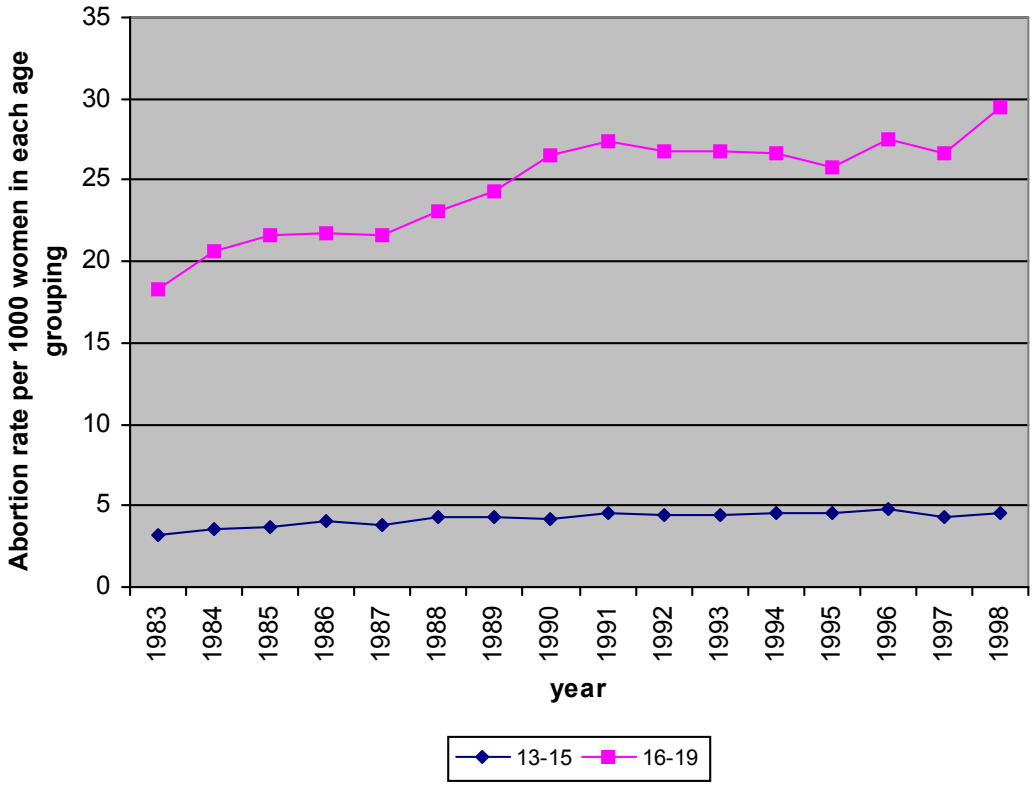
As can be seen in Figure 1.9[1] below, over the same time period there have been similarly differing trends in abortion rates between older and younger teenagers. Amongst older teenagers the abortion rate rose steadily and significantly from 18.3 per 1000 in 1983 to a peak of 29.5 per 1000 in 1998 (ISD Scotland 1997, 2000). For younger teenagers the abortion rate rose in line with the birth rate from 3.2 per

[1] Data for this figure can be found in Appendix i.

1000 in 1983 to 4.8 in 1996, before declining slightly to 4.5 in 1998 (ISD Scotland 1997, 2000).

Figure 1.9

Abortion rates per 1000 Scottish women by age grouping, 1983 - 1998.



Source: ISD Scotland 1997, 2000.

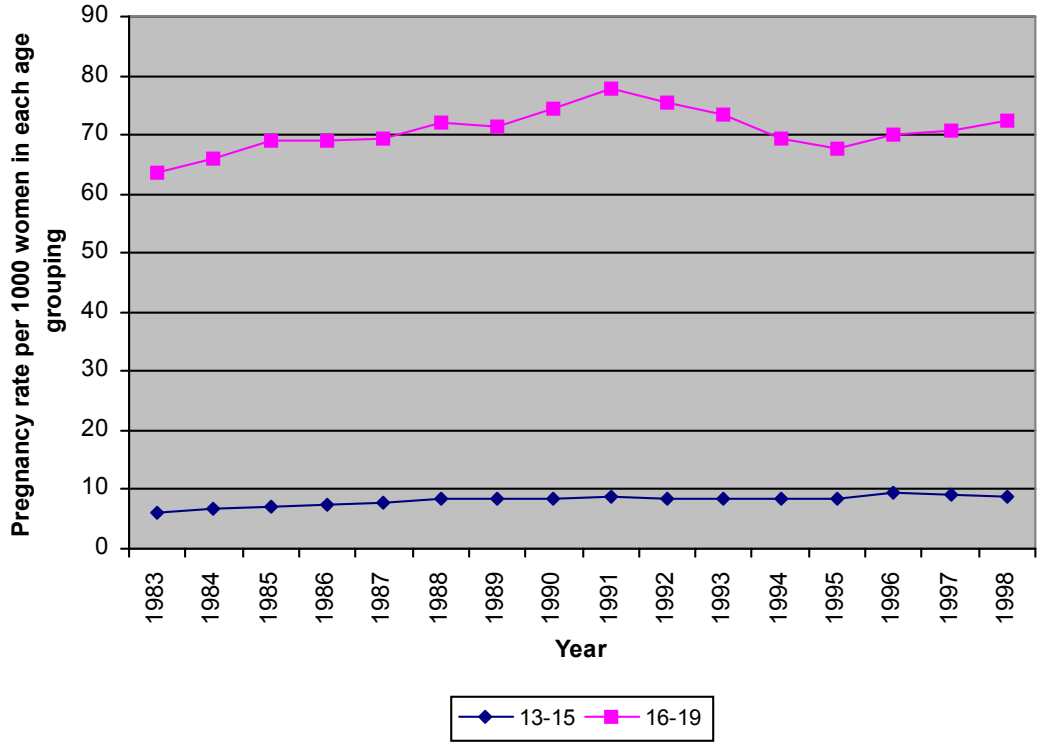
Pregnancy Rate

As can be seen in Figure 1.10[1] below, there has been very little change in the overall teenage pregnancy rates in all age groups in Scotland between 1983 and 1998. Although there has been an overall increase for both the 13-15 and the 16-19 age groups, the trends again are very different.

[1] Data for this figure can be found in Appendix i.

Figure 1.10

Teenage pregnancy rates per 1000 Scottish women by age grouping, 1983 – 1998.



Source: ISD Scotland 1997, 2000.

For older teenagers the pregnancy rate rose from a rate of 63.6 per 1000 in 1983 to a peak of 77.8 per 1000 in 1991. Since that time the rate steadily decreased to 67.6 per 1000 in 1995, although a small rise occurred again from 1995 to 1998 to a rate of 72.4 per 1000 (ISD Scotland 1997, 2000). Therefore although the rate in 1998 is higher than 1983, it has also declined from the peak of 1991.

For younger teenagers the trend in teenage pregnancy has been one of a steady increase from 6.2 per 1000 in 1983 to a peak of 9.5 per 1000 in 1996, with a small decline over the following two years to 8.9 per 1000 in 1998 (ISD Scotland 1997,

2000).

Abortion Ratio

As has been noted in Figures 1.8-1.10, the trends for older and younger teenagers differ. What is also apparent is that both the abortion and birth rate for older teenagers are higher than those for the younger teenagers. What is not apparent is that the proportion of pregnancies that have resulted in abortion is considerably higher for younger teenagers compared to their older counterparts. Older teenagers are much more likely than their younger counterparts to give birth than to opt for an abortion.

The abortion and birth rates for the younger teenagers have changed relatively little, with the proportion of abortions being marginally higher than the proportion of births (except for 1987 when they were equal and 1997 when there were marginally more births than abortions), as can be seen below in Figures 1.11 below[1]. The greatest difference occurred in 1994 when the abortion rate of 4.5 per 1000 accounted for 53.6% of all pregnancies and the birth rate of 3.0 per 1000 accounted for 46.4% of all pregnancies (ISD Scotland 1997, 2000).

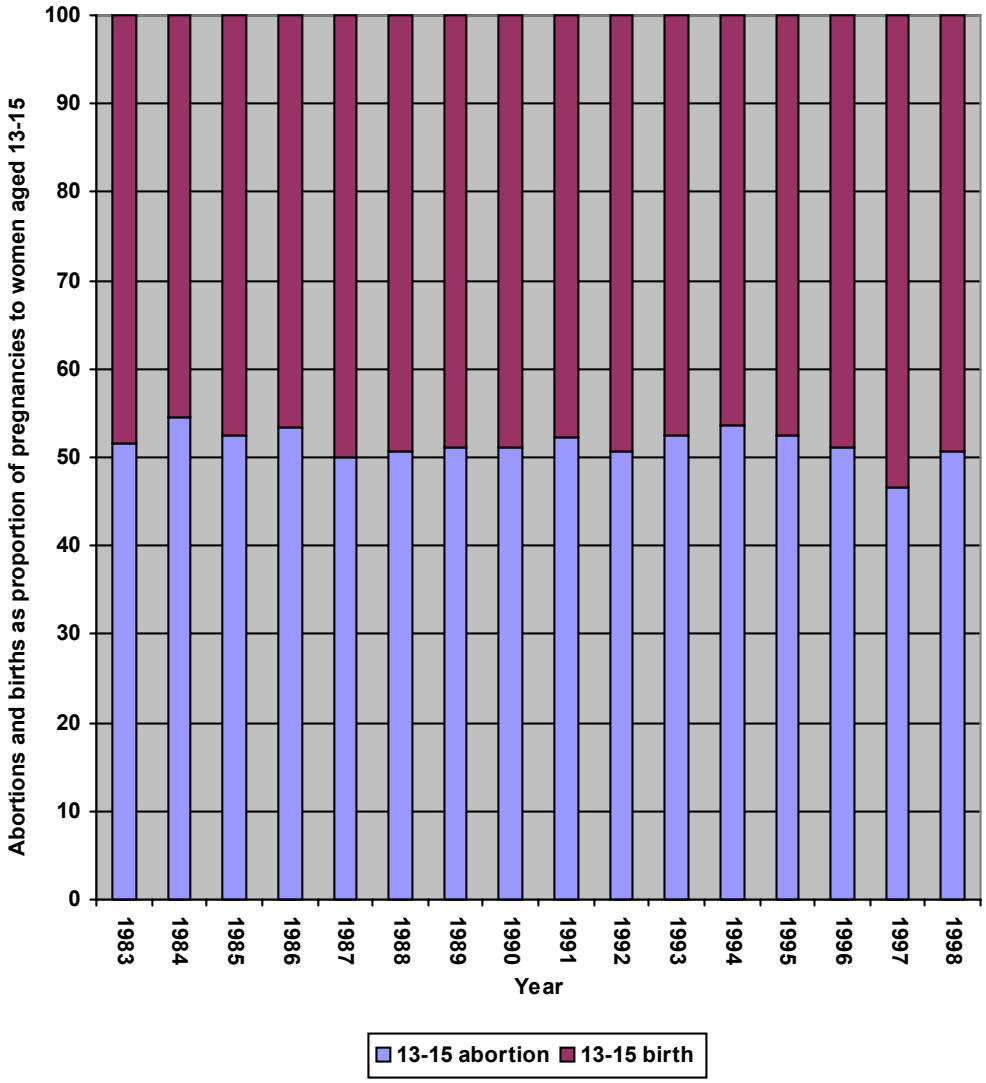
In the older age group however, as can be seen in Figure 1.12, the abortion rate has always remained lower than (although increasing in proportion to) the birth rate. Between 1983 and 1991 both the birth rate (45.2- 50.4 per 1000) and the abortion rate (18.3 – 27.4 per 1000) rose for women aged 16-19 (ISD Scotland 1997, 2000). Since the peak in 1991 both rates have witnessed steady decline (with the

[1] Data for this figure can be found in Appendix i.

exception of the slight rise in abortion in 1996[1]).

Figure 1.11

Abortions and births as a proportion of all pregnancies to women aged 13-15 in Scotland, 1983-1998.

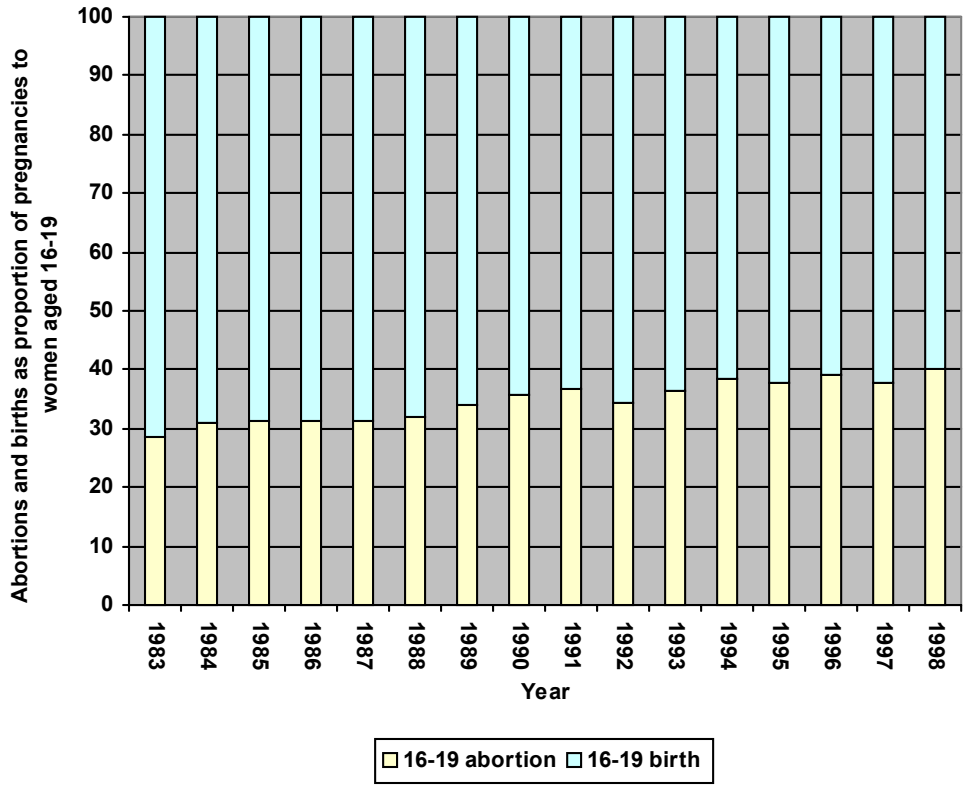


(Sources: ISD Scotland 1997, 2000).

[1] The rise in the abortion rate in 1996 has been documented to be as a result of the pill scare in 1995 (Kane & Wellings 1999).

Figure 1.12

Abortions and births as a proportion of all pregnancies to women aged 16-19 in Scotland, 1983-1998.



(Sources: ISD Scotland 1997, 2000).

Associated Factors

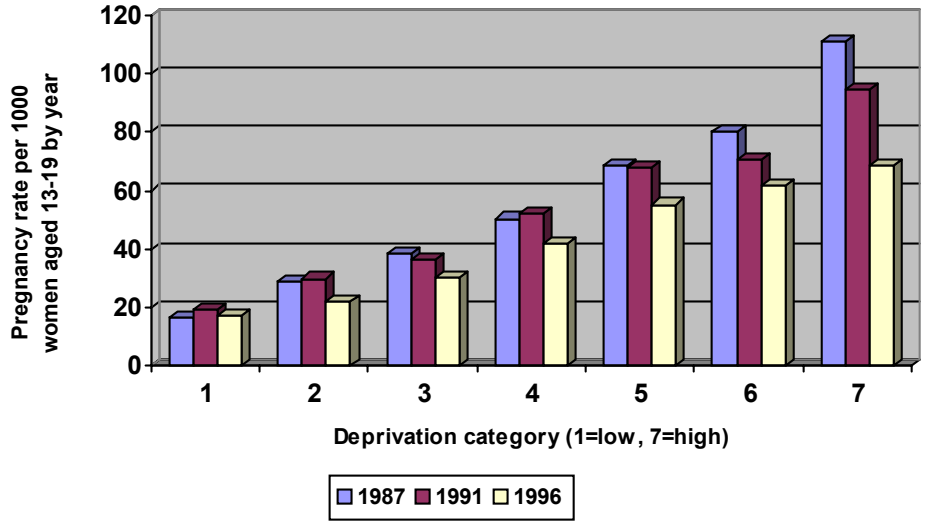
Socio-Economic Factors

In relation to teenage pregnancy and teenage motherhood, the association with poverty and deprivation has long been noted in Scotland. A study on Tayside revealed that the teenage pregnancy rate for girls in poor neighbourhoods was six times that for girls in more affluent areas and that girls in poor areas were more likely to reject abortion (Smith 1993). Figure 1.13 below shows the teenage pregnancy rates by deprivation categories (as calculated by Carstairs and Morris

(1991)).

Figure 1.13

Teenage Pregnancy Rates and Deprivation in Scotland



Source: Turner 2000.

As can be seen from Figure 1.13 above, the rate of teenage pregnancy has remained consistently lower from 1987–1996, the higher the socio-economic status of the mother. It is important to note, however, that the slight decline in pregnancy rate over that period of time has been consistent across all socio-economic groups.

Employment

In relation to how the employment rate of women aged 15 and over potentially relates to the trends in births and abortions to women aged 13-19 in Scotland, correlations were found to differ considerably from that found by Kane & Wellings (1999) for Europe as a whole. In other words, over the time period 1991-1998, whilst there was a weak correlation found between higher rates of abortion to women aged 13-19 and higher economic activity of women aged 15 and over

(r_s=0.37)[1], there was a very strong correlation found between higher birth rates amongst women aged 13-19 and higher economic activity of women aged 15 and over (r_s =0.77)[2].

This could suggest that in Scotland, being an active member of the workforce and having some degree of economic independence may mean that the prospect of motherhood is perceived as an affordable choice, rather than motherhood being perceived as a hindrance to economic activity.

Education

Historically Scottish economy has been dominated by heavy industry (especially in the south), which has impacted strongly on national culture (Furlong et al. 1998). Since the 1980s and the demise of many primary industries in Scotland, the school to work transition has become increasingly prolonged and the numbers of young people who are choosing to remain at school beyond the age of 16 or to enter some for of training post-compulsory schooling is increasing annually. However, although the proportion of young people continuing at school or in training is increasing, the rates of continuation are much lower in comparison to the rest of Europe (approximately 65-70% as opposed to 85-96% in other European countries (EUROSTAT 1998-99.)).

In Scotland, one in ten young people still enter the labour market directly from the comprehensive school at the age of 16 (Roberts 1997) according to Furlong et al.

[1] Source for data on employment figures was European Commission 2001, source for abortion data was Singh & Darroch 2000.
[2] Source for data on employment figures was European Commission 2001, source for birth data was Singh & Darroch 2000.

(1998) expectations of young people remain higher in Scotland than in Finland, that they will still make an early entrance into the labour market, even if that expectation is unrealistic.

Further to this, in relation to the previous section on employment which revealed a trend of higher birth rates amongst young women aged 13-19 when the rate of economic activity amongst women aged over 15 was high, an increase in the proportion of young people remaining in education longer and delaying their entry into the labour market, may also have an indirect effect on the rate of pregnancy to young women.

Causes of Teenage Pregnancy

Coital Activity

Between 1960 and 1990 the median age of first heterosexual intercourse dropped from 21 to 17 amongst females and from 20 to 17 amongst males. Over the same time period the proportion of teenagers reporting experience of heterosexual intercourse before turning 16 increased from around 1% to 20% (McIlwaine 1994).

Often in the literature confusion arises over what kinds of sexual activity young people have actually experienced. Table 1.6 below shows the results of the most recent work conducted in this area by Currie and Todd (1993) in the study of *Health Behaviours of Scottish School Children*, which presents data on sexual experience of Scottish School Children[1] (except Strathclyde region). From this table it can be seen that by age 15-16 at least three quarters of young people had

[1] The term 'children' is used here as that was the terminology used by the authors, it is however questionable as to whether 15 and 16 year olds should be called 'children'.

hugged and kissed on the mouth, over two thirds had experienced 'light' petting and approximately half in 'heavy' petting. Between one quarter (young men) and almost one-third (young women) had reported engaging in heterosexual intercourse (Currie & Todd 1993:12).

Table 1.6

Sexual experience of Scottish schoolchildren aged 15-16.

Sexual experience	Young men %	Young women %
Hugging	61.5	74.4
Kissing on the mouth	73.3	84.2
Light Petting (above waist)	66.3	70.8
Heavy Petting (below waist)	48.6	53
Sexual Intercourse	25.8	31.2

Source: Currie & Todd 1993.

Contraceptive Use

Free contraception was introduced to the NHS in 1975. Since that time increased contraception use has been apparent amongst Scottish teenagers. In the mid-1970s, the majority of young people were already sexually active before attending a clinic for the first time (around 90%) (Bury 1980). Since then in some areas of Scotland, young people have been more likely to seek contraception advice before starting their sexual relationships. For example by 1980 over 25% of young people attending a youth advisory service in Edinburgh did so prior to their first intercourse compared with 13% in the mid-1970s (Bury 1980).

Although sexually active teenagers are more likely to use contraception now than was the case twenty years ago, a strong determining factor in use of contraception at first intercourse has been shown to be age (McIlwaine 1994). For those over 16 years of age, some form of contraception was reported to have been used by 68% of women and 64% of men at first intercourse. In comparison, no method was reported to have been used at first intercourse by nearly 50% of young women and more than 50% of young men under the age of 16 (McIlwaine 1994).

Additionally, during the early 1980s the favoured method of contraception by young women was the pill (Jamieson et al 1983, Brook 1983, Harrison & Bury 1982). This reliance on the pill as opposed to the condom shifted the responsibility of contraceptive use in Scotland away from young men onto young women (Meredith 1983). During the late 1980s and 1990s this pattern changed with more young people choosing the condom as their preferred method of contraception. The SNAP report (McIlwaine 1994) revealed that most youngsters will now use condoms as their preferred method especially early in their sexual lives.

There is not much information at present about emergency contraception use by Scottish teenagers. The results of one study in the Lothian area of Scotland looking at the knowledge of emergency contraception - its safety, efficiency, time limits and where to obtain it - revealed that the majority (93%) of fourth year girls (aged 14-15) had heard of emergency contraception (Graham et al. 1996). Although one third of sexually active girls in the area had already made use of this method, knowledge was poor regarding correct time limits of its use. This study proposed that the high use of emergency contraception in this geographical area

could potentially be used to explain the fairly constant rate of teenage pregnancy in the area, despite increasing experience of sexual activity (Graham et al 1996).

Summary

This chapter began by exploring the European context in relation to teenage pregnancy. The trends in pregnancy and related rates across Europe since the early 1970s were presented, highlighting that although patterns of decline in these rates began at different times in different arts of Europe, Scotland, Northern Ireland, England and Wales were the only countries where there was a distinctly different pattern from any other area in Europe. In other words in most Northern and Western and some Eastern European countries, the trend in teenage pregnancy had been one of relatively sharp decline throughout the 1980s and a continual but markedly slower decline throughout the 1990s. Where as in Scotland, Northern Ireland, England and Wales, the trend had been one of decline through the 1970s and then from the 1980s and through the 1990s, a pattern of very little change.

In an attempt to explore potential factors relating to these differencing trends the chapter then presented a range of associated and causal factors relating to teenage pregnancy. These included indirect dynamics, such as economic, employment and educational factors, which may impact upon the life choices (including young parenthood) made by young people, as well as factors relating directly to the sexual and contraceptive behaviour of young people.

In relation to the associated factors there appeared to be a number of relationships in relation to the rates of births and abortions amongst young women aged 15-19.

The most significant of which in aggregate European terms being:

- Countries with stronger economic development and a more equitable distribution of household income generally had lower rates of teenage motherhood,
- Countries where there were higher rates of economic activity in the female population aged over 15, generally had higher rates of abortion amongst young women aged under 20.
- Countries with high continuation rates in education or training post-16 had considerably lower pregnancy rates to women aged 15-19, but the high continuation rates did not correlate strongly with rates of economic activity.

In relation to the causes of teenage pregnancy, this chapter has shown that throughout Europe the age of menarche has lowered consistently over the last century, levelling off at twelve to thirteen years of age by the mid 1960s and that the age of first intercourse is now more or less the same (approximately 17 years) in most European countries, with the exception of Scandinavian countries (on average 16 years). The final causal factor explored was that of contraceptive use amongst young people and whilst the research evidence shows that generally the younger the women, the less likely that contraception will be used at first intercourse, there were higher rates of contraceptive use amongst young women from northern European countries and the Netherlands.

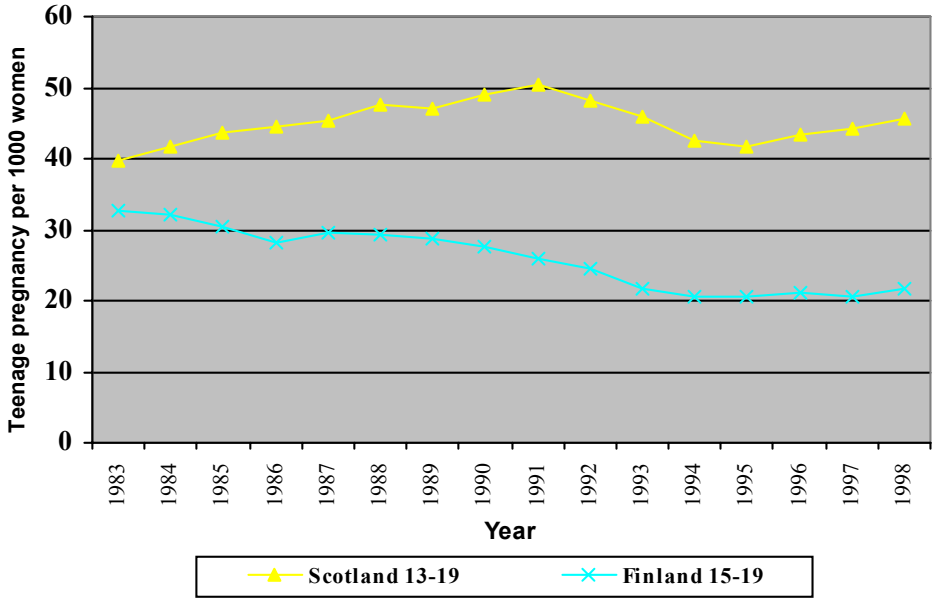
The chapter then focused on Finland and Scotland highlighting that these two countries have and continue to experience contrasting trends in teenage pregnancy and related rates. Although there are problems within the format of the two data

sets that prevent their direct comparison, an approximate idea of the differing trends is still useful[1] (see Figure 1.14[2] below). From the available data, what is apparent is that Scotland has not achieved the declining trend in teenage pregnancy that has been the case in Finland.

In addition to the difference in the direction of each country's respective trends, there is also a noted difference between the proportion of pregnancies that result in abortion as opposed to births as can be seen in Figure 1.15[3] below. In other words, more young women in Scotland opt to give birth, than is the case in Finland.

Figure 1.14

Teenage Pregnancy Rates by country, age group and year, 1983-1998

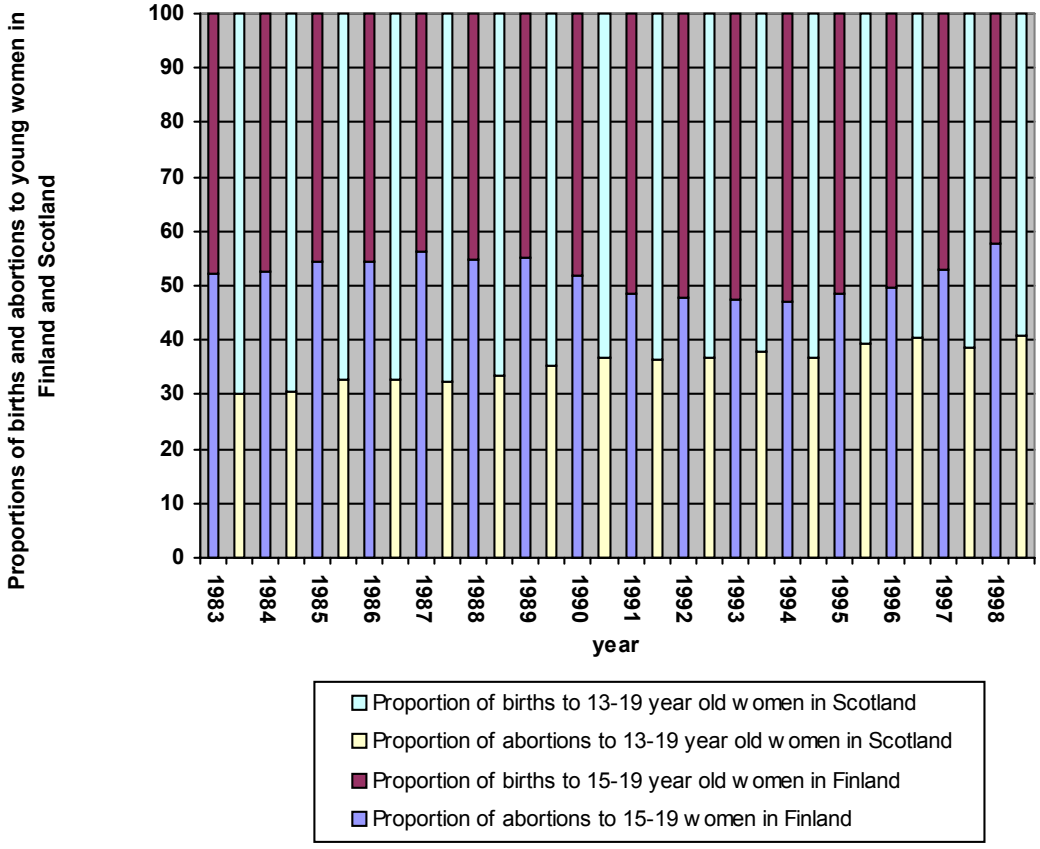


Source: ISD Scotland 1997, 2000, Gissler et al. 1996, Gissler 1999.

[1] In Figure 1.11 the 13-19 rate for pregnancy has been used for Scotland. Although it is still not directly comparable with the 15-19 Finnish rate, it offers a closer comparison.
[2] Data for this figure can be found in Appendix i.
[3] Data for this figure can be found in Appendix i.

Figure 1.15

Abortions and births as a proportion of total pregnancies by country, age group and year, 1983-1998



Sources: Gissler et al. 1996, Gissler 1999, ISD Scotland 1997, 2000.

In relation to potential associated factors, the relationships in these two countries differed somewhat from the relationships across Europe as a whole. One similarity was found in relation to the association between poverty and a higher risk of pregnancy, which was apparent in both countries. However, in neither country could socio-economic status explain the trends in teenage pregnancy over time. In relation to the employment activity of women aged 15 and over, in Finland there was only a weak correlation found between increased rates of economic activity

and higher rates of births to teenagers, whereas in Scotland this proved to a significant relationship. In contrast while only a weak relationship existed between increased rates of economic activity and higher rates of abortions to teenagers in Scotland, the opposite was found to be the case in Finland.

In relation to the rate of young people continuing in education or training and teenage pregnancy, both countries fit the pattern found across Europe in general whereby, higher continuation rates correlated with lower pregnancy rates amongst young women. This could suggest that by remaining in education longer, young women in Finland are indirectly delaying pregnancy and parenthood.

In addition to the same legal age of consent in Finland and Scotland, there is no significant difference between the two countries in either the age of first intercourse or the amount of sexual experience between the cohorts examined. When aspects of Tables 1.5 and 1.6 were combined (as shown in Table 1.7 below), no significant differences in levels of sexual behaviour were found, with the exception of the proportions of young men in Finland reporting sexual intercourse. This may however be explained by the slight difference in the make up of the cohort[1].

[1] The two cohorts being compared in Table 1.7 are slightly different and therefore should be viewed with caution. The Scottish cohort contains 15 and 16 year olds as opposed to the Finnish cohort being solely made up of 15 year olds.

Table 1.7

Sexual experiences of Scottish and Finnish young people (%) in 1992.

	Scottish* young men	Finnish** young men	Scottish* young women	Finnish** young women
Sexual experience	%	%	%	%
Kissing on the mouth	73.3	69	84.2	78
Light Petting (above waist)	66.3	62	70.8	67
Heavy Petting (below waist)	48.6	41	53	52
Sexual Intercourse	25.8	19	31.2	31

* = 15-16 years of age
** = 15 years of age

Sources: Currie & Todd 1993, Papp 1997.

What is most noted from the examination of all associated and casual factors related to teenage pregnancy, however, is the rate of contraceptive use of young people in both countries. It appears from the evidence presented so far that contraception usage especially at first intercourse is the most significant difference between the two countries as can be seen in Table 1.8 below.

Table 1.8

Use of contraception at first intercourse aged 15 (15-16 in Scotland) in 1992 (%)

Contraceptive Use	Scottish young men %	Finnish young men %	Scottish young women %	Finnish young women %
Reliable method used	45	87	52	80
Non reliable method or No methods used	55	13	48	20

Sources: McIlwaine 1994, Papp 1997.

These differences are remarkable for both young men and young woman and offer

a very plausible reason as to why there are such differences in pregnancy rates between the two countries especially in younger age groups. The fact that such a large proportion of young men in Scotland failed to use contraception at first intercourse, adds weight to the need for more consideration to be given to the sexual health needs of young men as part of the solution to decreasing the rate of unintended teenage pregnancy in Scotland[1].

The next logical step therefore is to consider why this difference in contraception use exists and whether there are significant differences in the policies at work in Scotland and Finland that may offer an explanation as to why these differences exist. The next chapter, therefore, sets out the three policy areas than have been presented for exploration within this thesis and reasons for their inclusion. This is then followed by a comprehensive review of available literature on each of the policy areas.

[1] The issue of young men's needs in the area of sexual health is discussed in Chapter Two.