

Lone mothers, work and depression

Susan Harkness and Amy Skipp



About the authors

Dr Susan Harkness is Reader in the Department of Social & Policy Studies at the University of Bath.

For the duration of the project, **Amy Skipp** was the Research Officer at Gingerbread. Amy is now a qualitative Research Director in the Children and Young People Team at NatCen Social Research.

For further information about Gingerbread's policy proposals to improve employment policy for single parents see <http://gingerbread.org.uk/content/894/Make-it-work>

The authors would like to thank **Caroline Davey, Martin Evans, Karin Silver, Kitty Stewart, Marcia Gibson**, and members of the advisory committee for their contribution to the project.

About the Nuffield Foundation

The Nuffield Foundation is an endowed charitable trust that aims to improve social well-being in the widest sense. It funds research and innovation in education and social policy and also works to build capacity in education, science and social science research. The Nuffield Foundation has funded this project, but the views expressed are those of the authors and not necessarily those of the Foundation.

This briefing paper is also available to download from www.nuffieldfoundation.org. Extracts from this document may be reproduced for non-commercial purposes on condition that the source is acknowledged.

Copyright © Nuffield Foundation 2013
Registered charity 206601
ISBN 978-0-904956-90-0

Nuffield Foundation
28 Bedford Square
London WC1B 3JS

Gingerbread
Single parents, equal families

Contents

Foreword	2
Overview	3
Lone mothers, work and depression	5
Why might employment matter?	5
The influence of welfare reform	6
The changing relationship between work and depression	6
Expectations and attitudes to work and their influence on mental health	8
Work-life conflict: the role of flexible work and childcare provision	9
Is any work better than no work?	10
Job satisfaction and job characteristics	11
Evidence from the qualitative sample	13
Summary and discussion	16
References	18
Appendix	19

Foreword from the Nuffield Foundation

In the mid 1990s, the rate of depression among lone mothers was one in three, significantly higher than among many other high-risk groups including unemployed men. As well as the negative impact this has on the women themselves, we know that maternal depression is strongly associated with children's cognitive and emotional well-being.

This report presents the findings from a project funded by the Foundation in 2010 designed to explore the relationship between lone parents, work and mental health. The research team, led by Dr Susan Harkness, addressed three core questions: does employment alleviate depression among lone parents; how important is job quality; and what role, if any, does the relevant policy framework play in determining mental health outcomes?

The findings make for interesting reading. Since the early 1990s, the rate of depression among lone mothers in paid employment has fallen, whereas the opposite is true of those not in work. For mothers in couples, there was no change in the relationship between work and mental health.

The decrease in the risk of depression among lone mothers in employment occurred over a period of time that saw reforms to the welfare system designed to facilitate and support lone parents to find paid work, such as the introduction of tax credits and a system of personal advisors.

The researchers conclude that being in paid employment, under a supportive policy and employer environment which enables lone parents to balance work and childcare, is a key factor in explaining the fall in lone mothers' rates of depression over the last decade.

They also found that job characteristics typically associated with better mental health are less important to lone mothers than other workers. Wage rates, job quality and career prospects are less important to lone mothers' mental well-being than having a job which allows them to combine work with childcare responsibilities.

In light of this, the authors conclude that simply being in paid employment is not sufficient in itself to reduce the risk of depression. And policies designed to encourage more lone mothers into work, or to work longer hours, may actually risk pushing up the rate of maternal depression if they are not accompanied by additional measures to help them balance work and childcare responsibilities.

We would like to thank the research team for their commitment to this project, which contributes valuable evidence to the debate on how best to improve employment policy for lone parents.



Teresa Williams
Director of Social Research and Policy

Overview

Politicians and policy makers have long championed the idea that ‘work is good for you’. But for lone mothers, paid work that enables them to balance work and childcare responsibilities really does improve their mental well-being. This study – which combines quantitative analysis of the British Household Panel Survey with qualitative research among lone parents – found that being in paid employment, under a supportive policy environment which enabled lone parents to balance work and childcare, was a key factor in explaining the fall in lone mother’s rates of depression over the last decade.

This improvement in mental health was only found among working lone mothers; those not in work saw their mental well-being deteriorate over the same period. The situation in 2003–08 also contrasts to that a decade previously when work and positive mental health showed little association, with lone mothers who were both in and out of work at high risk of depression.

These findings provide clear evidence that under a supportive policy environment work is strongly associated with improved mental health. Moreover, the research suggests that welfare reform led to improvements in mental health among lone parents not just by pushing up their employment rates, but also by enabling them to balance work and care, leading to substantial improvements in the well-being of those in work.

Key findings

- For lone mothers, paid work was strongly associated with improved mental health outcomes in 2003–2008.
- This situation contrasts to that a decade earlier. In 1993–98, lone mothers both in and out of work faced a high risk of depression. For non-working lone mothers, mental health showed a small deterioration during this period, while for mothers in couples, there was no change in the relationship between work and well-being.
- Paid work that allowed lone mothers to achieve a satisfactory balance between work and childcare responsibilities mattered most to improvements in their mental well-being; and had a much more significant effect on reducing the risk of depression in lone mothers than income.

- Supporting lone mothers to work, and to balance work and childcare responsibilities, matters for reasons over and above any financial gains to employment.
- Welfare reforms which merely increase the pressure on lone parents to move into any work, or to work longer hours, may risk pushing up the rate of maternal depression in the coming years.
- Without additional policy measures to help lone mothers balance work and home life, financial incentives designed to encourage longer working hours may not necessarily have the desired effect.

Context and implications

At just over 30% in the mid-2000s, the high rate of depression among lone mothers is an important area for policy concern. Although lone mothers remain at greater risk of depression than other groups, the last decade has seen some improvement in their overall mental well-being. This improvement was concentrated on those in paid employment and occurred alongside a sharp rise in the employment rate of lone mothers. To date, the relationship between work and mental health for mothers in general, and lone mothers in particular, has been largely neglected in the academic literature. This research project examined the changing relationship between work and mental health for lone mothers since the early 1990s. Using quantitative data from the British Household Panel Survey (BHPS) and qualitative research with lone mothers, we examined the influence of work on the risk of depression among lone mothers, contrasted the experience of lone mothers with mothers in couples, and explored the characteristics which influenced the relationship between work and mental well-being.

We found that the significant improvement in lone mothers' mental well-being was only seen among working lone mothers; among those not in work, mental well-being deteriorated over the same period. This finding is in stark contrast to a decade previously when work and positive mental health showed little association; both lone mothers in and out of work were at high risk of depression. Our findings therefore provide clear evidence that, for lone mothers, by 2003–2008 work was strongly associated with improved mental health outcomes.

However, it is important to note that the job characteristics typically associated with better mental health were found to be less important to lone mothers than other workers. Wage rates, job quality and career prospects appear to matter much less to lone mothers' mental well-being than having a job which allows them to combine work with childcare responsibilities. This is characterised by flexibility over working hours and not working longer hours than desired.

Regardless of the type of job or the level of earnings, our multivariate analysis showed that the most consistent and important factor influencing lone mothers' risk of depression was working the desired number of hours. Whether lone mothers worked full-time or part-time, those who were working their preferred number of hours were less likely to be depressed, while those who wanted to work fewer hours or were working unpaid overtime were the most likely to be depressed. In other words, paid work which allows lone mothers to achieve a satisfactory balance between work and family life matters most to improvements in their mental well-being.

Our finding that simply being in (their preferred hours of) paid work had a much more significant effect on reducing the risk of depression in lone mothers than the level of earnings, supports previous research findings for unemployed men which have shown that the non-financial benefits of work – in providing a sense of self identity or self-esteem, for example – are of greater importance to mental well-being than the financial benefits. Similarly, our research suggests that supporting lone mothers to work matters for reasons over and above any financial gains of employment. And not only is work important to maternal mental health, but there is a strong association between maternal depression and children's cognitive and emotional well-being, independent of economic resources (see Kiernan and Huerta, 2008; Gregg, Harkness and Smith, 2009).

However, our research also raises the possibility that, for this group of parents, policy incentives designed to encourage longer working hours may not necessarily have the desired

effect on mental well-being. Without additional measures to help working mothers balance work and childcare responsibilities, welfare reforms which merely increase the pressure on non-working lone parents to move into work, or to work longer hours among those already in work, may also risk pushing up the rate of maternal depression among working lone mothers in the coming years. Our research suggests that work can be a very important factor in influencing lone mothers' mental health, but only if it is encouraged under a supportive policy environment.

Methodology

We used data from the British Household Panel Survey (BHPS) to examine the changing relationship between work and mental health for lone mothers at two points in time, from 1993 to 1998 and from 2003 to 2008. The BHPS contains over 8,000 observations each year and includes around 400 families headed by lone mothers. Using the General Health Questionnaire, a tool commonly used by psychologists to identify those at high risk of depression, our quantitative analysis compared the influence of work on the risk of depression among lone mothers to mothers in couples. We complemented the data analysis with 20 qualitative interviews conducted in 2011 of lone mothers who had some experience of poor mental health. The aim of this survey was to provide a richer, more up-to-date understanding of the factors influencing the complex relationship between work and depression among lone mothers, particularly in light of a changed policy and economic environment since 2008.

Our findings in more detail

Lone mothers, work and depression

In recent years mental health has been highlighted as an important area of policy concern, with the growing incidence of depression among women a particular problem (Wittchen et al, 2011). Lone mothers' risk of depression is three times greater than that of partnered mothers or women without dependent children (Targosz et al, 2003). Using data from the British Household Panel Survey (BHPS), this project looked at how the risk of depression among lone mothers changed over the decade to 2008, and at how being in paid work has influenced this risk. This period reflects a time of significant policy change, with reforms to the welfare system encouraging and supporting lone parents to move into paid work, the introduction of tax credits ensuring work was financially worthwhile, and a system of personal advisors providing tailored support to lone parents seeking work.

One in three lone mothers were depressed in the mid-1990s, a rate far greater than that among many other high-risk groups, including unemployed men. At this time, lone mothers who were both in and out of work faced similar rates of depression, and work did little to alleviate this risk. The decade to 2003–08 saw significant improvements in lone mothers' mental health, but all of this change occurred among those in paid work. Indeed the rate of depression among working lone mothers declined to such an extent that by 2003–08 those that were in work had a risk of depression no greater than that of partnered mothers. This contrasted with the experience of those not in work who saw a deterioration in their mental health over the decade, and with the experience of mothers in couples for whom there was little change in the risk of depression or its association with work.

These findings suggest that welfare reforms have affected the well-being of lone mothers by promoting the mental health of those in work, while at the same time raising lone parents' employment levels. We conclude that for lone mothers, work can help to reduce the risk of depression when the policy environment is enabling. However, it also shows that work is not a panacea and that without a positive policy environment that supports and rewards work, similar mental health gains may not be achieved, as was the case in the mid-1990s.

Why might employment matter?

Our study demonstrates for the first time that work does matter to lone parents' mental well-being, and that it is of greater importance to lone mothers than to those with partners. It also shows that the health benefits of work may not be seen in the absence of an enabling policy environment and where there is not adequate support for lone mothers to balance work and care.

There is now ample evidence that work matters to mental well-being for men, with both unemployment and retirement associated with deteriorations in mental health. Research also shows that the nonpecuniary costs of job loss to individuals' well-being are much greater than those arising from a loss of income; for men the value of work in providing a sense of identity, social relationships and self-esteem is substantial (Winkelman and Winkelman, 1998; Heliwell and Huang, 2011). Yet there are good reasons to think that the relationship between work and mental health may differ for mothers in general, and lone mothers in particular. For example, many of the benefits provided through work for men may be found elsewhere for mothers, with social relationships and a sense of identity being forged through a mother's role as a carer.

What little evidence there is suggests a hazy relationship between work and mental health for mothers. Research,

based on data from the 1990s and earlier, has found work to have little or no effect of work on mothers' mental well-being (see for example Repetti, 1989). While lone mothers may share some of the features that influence the risk of depression with married and cohabiting mothers, there are also potentially important differences. For lone mothers, work may have a more important role in sustaining social relationships and in providing an income, but "role strain" may also be greater because they have no-one with whom to share the burden of childcare and managing the household.

A UK study examining the effect of work on mental health in the mid-1990s concluded that, among those with pre-school children, work had little influence on mental health (Baker and North, 1999). To our knowledge, no quantitative studies have looked specifically at this relationship for all lone mothers. Some more recent studies have looked at how welfare reform in the US and UK has affected the subjective well-being of lone parents, and we turn to this next.

The influence of welfare reform

Since 1999, state support for lone parents has undergone substantial change. Reforms to the welfare system have increased the benefit levels available to those out of work, but at the same time have incentivised lone parents to work with the introduction of tax credits ensuring that work (of over 16 hours a week) always pays, and by extending state support for childcare. Around the same time, the New Deal for Lone Parents was introduced (in October 1998), which for the first time actively supported lone parents in finding work, even though searching for work was not a requirement of receiving benefit. Since 2003 the roll-out of Work Focussed Interviews meant that "while benefit entitlement conditions [...] have not fundamentally changed, the requirement that all new claimants attend a work-focused interview has supported an approach in which all working-age people living on benefits at least consider the possibility of entering the labour market" (Hirsch and Millar, 2004: p3).

These reforms contrasted sharply with the policy environment in place before 1999, when there was little expectation that lone parents should work. This change marked a substantial policy shift and one which, as Rowlingson and Millar (2002) have noted, reflected a movement away from the male breadwinner model of society to one where adults were, with few exceptions, expected to work. Up to 2008, this expectation was broadly managed through the provision of support and incentives for lone parents to move into work, a situation in sharp contrast to that in the US, where welfare reform was associated with

the introduction of much tougher work requirements and few financial gains for those that entered employment.

The UK reforms have had a large and positive effect on lone parents' employment rates, and brought about an improvement in their subjective well-being (Gregg et al, 2009). Perhaps surprisingly, similar mental health gains are seen in the US in spite of the fact that welfare reform, while associated with increased employment rates among lone mothers, has not raised incomes or reduced poverty (Herbst, 2012; Ichfer, 2011). Herbst suggests that welfare reforms may "have generated large non-monetary – or psychic – gains through its impact on employment" (p234). However, while the US evidence is suggestive in concluding that the benefits to work might extend beyond those that accrue from increased income, none of the studies on welfare reform look directly at how the mental health of those in employment, and those out of work, changed.

The changing relationship between work and depression for lone mothers

How has the relationship between work and the risk of depression changed for lone mothers? We examined the relationship between work and depression at two points in time: 1993–98 and 2003–08. The choice of time periods is important because of the substantial policy change that took place during this time. **Figure 1** shows how the relationship between work and depression has changed over the last decade, both for lone mothers and mothers with partners. Between 1993–1998 and 2003–2008 the share of lone mothers that were depressed fell by four percentage points to 29%, with this overall movement disguising divergent trends for those in and out of work. Among lone mothers in 1993–98, there were few mental health benefits associated with work, and those in employment (whether working full or part-time) and those not in work had very similar rates of depression, with around one in three being depressed.

By 2003–08 there was a radical shift in the relationship of depression to mental health, with working lone mothers having considerably lower rates of depression than before, and compared to those not in paid employment. This improvement was notable given the context of a large increase in the number of lone parents in employment over this period, and a particularly rapid rise in those working part-time (16+ hours). For mothers with partners, employment is also associated with lower rates of depression in both periods, although the strength of this association is much weaker than that for lone mothers, and overall rates of depression are lower (at 24% in 1993–1998 and 22% in 2003–2008).

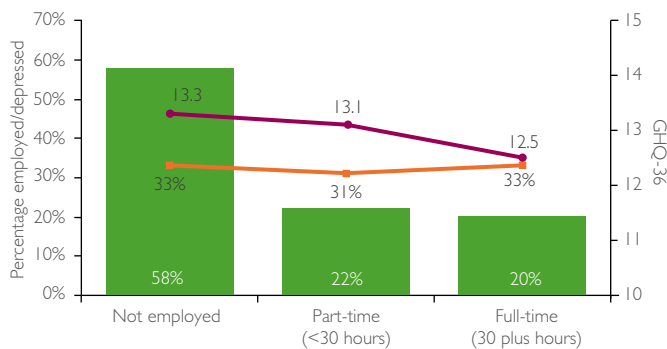
Our analysis focuses on the General Health Questionnaire as our main measure of mental health because we are able to track its change over time using the BHPS. However we also examined a wide range of alternative measures of mental well-being using cross-sectional data from the 2007 Psychiatric Survey of Morbidity (PSM). This shows that, whatever measure of mental health is used, there is a strong correlation between mental well-being and employment status for lone mothers. As in the BHPS data, mental well-being is strongly correlated with work, with full-time working lone mothers recording the fewest mental health problems, and work showing a far stronger correlation with mental health for lone mothers than it for mothers with partners (see **Appendix I**).

Of course there may be other differences in the characteristics of working and non-working lone mothers that influence the risk of depression, such as their age, the age of their children, and level of education. We account for these differences in our multivariate analysis of the risk of depression and find that, even after taking account of these differences, the positive association between work and mental health remains. In addition, when we look at individuals who move from non-employment into paid work, we find that the risk of depression falls substantially. This result also holds when other changes, which are associated with moving into work, such as age of youngest child and income, are accounted for using fixed effects panel data models. Conversely, this risk rises when lone parents move out of employment.

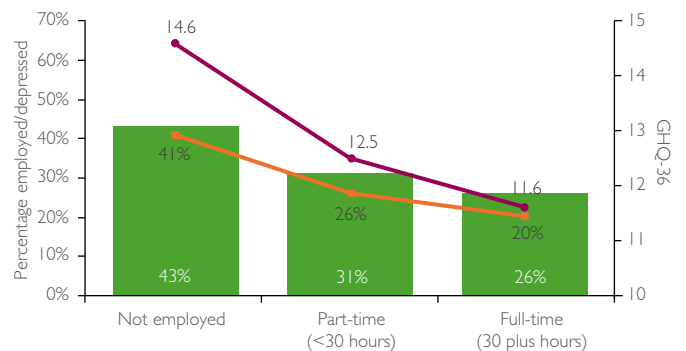
Figure 1: Employment status and depression ■ % in each employment status — % depressed — GHQ-36

Lone mothers

1993 to 1998

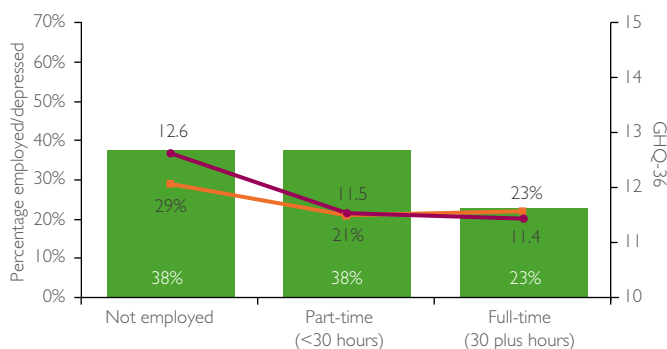


2003 to 2008

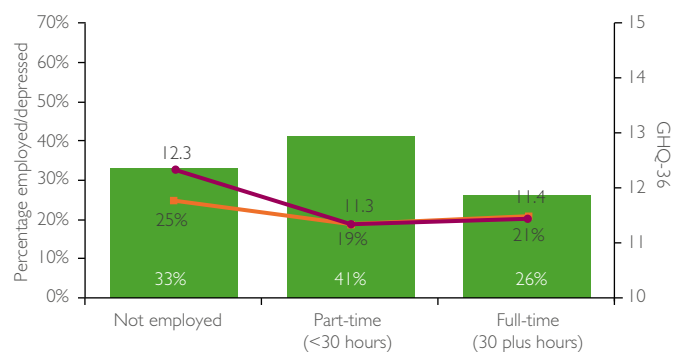


Mothers in couples

1993 to 1998



2003 to 2008



Our evidence shows that depression has eased among lone mothers over this period, but these gains may be, at least in part, a result of the fact that welfare reform raised incomes and reduced financial stress among lone mothers. Of course, employment bears a strong relationship to income and any analysis of the relationship between work and depression needs to account for this. Numerous studies have examined the link between income and poor mental health. These studies have found that having a low income is an important factor in raising the risk of depression, but that for better-off individuals, further increases in income do not lead to greater happiness (see for example Zimmerman and Kanton, 2005; Kahneman and Deaton, 2010).

Our analysis of the BHPS data similarly shows that for mothers in couples, rates of depression fall between the bottom and middle of the income distribution, whereafter the incidence of depression plateaus. For lone mothers however, the relationship between income and depression is much less clear – there is no correlation between lone mothers' position in the income distribution and depression, with those in the top income quintiles having a similar incidence to those in the lowest quintiles. When we conducted multivariate analysis of the influence of income on the risk of depression for lone mothers we found income had no statistically significant relationship to depression (regardless of whether income is specified as a logarithm of household income or as a set of dummy variables for position in the income distribution).

A potential explanation for the changing relationship between work and depression over time may be that “selection” into employment has changed. The argument goes like this: suppose lone mothers who work have a lower propensity to depression than those that do not. If this is the case, the observed relationship between work and depression in the cross-sectional estimates may reflect the selection of lone mothers with better mental health into work, and may not indicate any causal relationship. Moreover, if lone mothers who are not working are increasingly “negatively selected” over time, because as overall employment rates increase those with the poorest mental health are left behind, then any observed change in the relationship between work and depression may simply reflect this.

We accounted for this in two ways. First, as the data we have is panel data we were able to see how individuals' well-being changes upon entering or leaving work. By taking account of these individual “fixed effects” we showed that transitions into work on average lead to significant reductions in lone mothers' risk of depression in the post welfare reform period. We also tested whether there have been changes

in selection into employment over time, and in addition we conducted instrumental variables estimation by proxying parental employment with lone mothers' work history. Our results do not provide any support for changes in “selection” over time as an explanation for the observed change in the relationship between work and depression.

Expectations and attitudes to work and their influence on mental health

Welfare reform may have had an indirect impact on lone mothers' well-being by influencing expectations around work. The historical ambivalence of policy-makers towards lone parents and work was largely driven by social attitudes which regarded men as breadwinners and women as carers. For mothers, particularly those with children under the age of five, there was therefore a stigma associated with working. As female employment has grown, attitudes towards working mothers have softened, and we might expect this to lead to greater mental health benefits from work for all mothers. However, at the same time, greater expectations on mothers to work may have led to a reduced tolerance of benefit dependency and to increase the pressure on those mothers that do not work to enter employment. Data from the British Social Attitudes Survey confirm that attitudes towards mothers that work have been softening – people are much less likely to believe, for example, that work damages mothers' relationships with their children than a decade ago, and there has also been a rise in the number of respondents believing that mothers, and in particular lone mothers, have a duty to work to support their children.

These changes in expectations around work have been matched by changes in mothers' own attitudes towards work and home. Drawing on Hakim's preference theory (2003), we used data from the BHPS to classify mothers as having “traditional”, “modern” or “adaptive” preferences. According to Hakim, women that hold “traditional” preferences “prefer to focus their time and energy on home and family work, and thus seek a marriage with complete role segregation.” The work-orientated, or “modern” group are those for whom work is central to their identity. Empirically these are defined by their non-financial work commitment – those who would continue with paid work in the absence of economic necessity and their “primary earner” identity – as well as those that see themselves as sole or joint main earners within the family. The third group, defined by Hakim as having “adaptive” preferences, have a more complex and ambiguous set of preferences, and include those who want to combine work and family. This group, Hakim argues, are most likely to respond to changes in work and home opportunities. Using data from 1999, she finds 14% of

working age women to be home-orientated, 16% work-orientated and the rest to have adaptive preferences.

The BHPS data asks questions about individuals' attitudes towards work and family. Using these questions we similarly define individuals' preferences using a comparable period prior to welfare reform (1993–98). Those who were home-orientated are defined as those who agree or strongly agree with the statement "a husband's job is to earn money; a wife's job is to look after the home and family" (14% of all women age 20–59 in 1993–98). Two questions were used to define work-orientation: first respondents are asked whether "a woman and her family would be happier if she goes out to work" and whether "both the husband and wife should contribute to the household income." Again, 14% agreed or strongly agreed with both of these statements in 1993–98, and were defined as work-orientated. The decade saw a large decline in the number of lone mothers that were home-orientated: in 1993–98 lone parents were more likely to hold traditional views than other mothers, but by 2003–08 this was no longer the case. This change was most stark among those in work: in 2003–08 just over 3% of working lone parents could be described as home-orientated, a four percentage point fall over the decade. Nonetheless, while the share holding traditional values has shown a sharp decline, this is not matched by a rise in work-orientation – instead a growing share of lone mothers could now be described as having "adaptive" preferences.

But how do these attitudes influence the risk of depression? Our multivariate analysis of work attitudes finds a statistically significant association between work orientation and having a lower risk of depression – among working lone mothers, those with "modern" preferences are 9% less likely to be depressed than those with "adaptive" preferences. On the other hand, those with "traditional" preferences were, in 2003/2008, around one-quarter more likely to be depressed. For partnered mothers who work, these attitudes matter much less to overall mental well-being, perhaps reflecting the fact that partnered mothers have greater choices around work.

Overall, the results suggest that as attitudes towards women's role at work and home have become more progressive, working lone mothers have seen improvements in their mental health. But these effects are particularly important for lone mothers and have important implications for whether they are depressed when in work or not. By promoting changes in attitudes towards lone parents and work, welfare reform may therefore have had an indirect impact on the mental health of lone mothers who work.

Work-life conflict: the role of flexible work and childcare provision in supporting lone mothers' mental health

Work-life conflict is associated with significant mental health problems, and these have been extensively discussed in the epidemiology literature (see for example Dragano et al., 2008; Wang, Lesage, Schmitz, & Drapeau, 2008). Lone mothers who work, especially those in full-time jobs, may be expected to be particularly affected because they have no-one with whom to share the responsibility of raising children. The last decade has seen a number of policies put in place to promote work-life balance. There have been two major areas of reform. First, there has been an extension of policies which have led to an improvement in the quality of, and provided greater subsidies towards the cost of, childcare. The introduction of Working Families Tax Credits in 1999 was accompanied by a considerable increase in the level of financial support for childcare for lower-income families. At the same time, free childcare places (of 15 hours per week) have been rolled out with provision for all children aged over four from 1998, and over three from 2004. These measures have been associated with a significant shift in childcare use over time, with a particularly large increase in the use of formal childcare among lone mothers who work part-time.

Second, the right to request flexible working was introduced in 2003 for parents with children under six, with the requirement that employers properly considered applications. This right was subsequently extended to all parents and carers of children under 17 in 2009. These changes have led to an extension of "family friendly" working arrangements, with more firms offering flexible working hours and job share arrangements.

We investigated the extent to which these changes affected the incidence of depression among lone mothers. Looking first at childcare provision, the empirical evidence suggests that for lone mothers working full-time and with children under five, access to formal childcare can help reduce the risk of depression. For those in part-time employment and with school age children, however, access to informal support networks is more important: where lone mothers are able to rely on friends and family to help out with childcare this is particularly important to mental well-being. The extension of formal childcare since 1999 therefore appears to have had some impact on reducing depression among working lone parents with pre-school children, but has had a more limited influence on those with older children.

In order to look at the role of flexible working in influencing mental health we defined two types of flexible working

arrangements: those that may be typically available to all staff (flexi-time and annualised working hours), and those typically used to accommodate the needs of those with caring responsibilities (term-time working and job shares). For lone mothers, neither of these types of flexible working showed a significant association with mental health, either for those working full or part-time. The effect of these reforms on the mental health of lone parents appears to be limited, although this may in part be a result of the fact that very many lone parents already select into part-time work, which is itself a form of flexible work.

Is any work better than no work?

While welfare reform has been associated with a significant rise in the employment rate of lone parents (Gregg et al, 2009), concerns remain about the quality of jobs that lone parents are entering, and in particular about low pay (Evans et al, 2004). Yet in spite of these concerns, the empirical evidence tells us that work is on average strongly associated with improved mental health outcomes for lone parents. An important question then is whether these benefits apply across all job types, or do some jobs provide fewer benefits to mental well-being than others?

Empirical evidence has shown that for men, poor quality jobs can be as bad for mental health as unemployment (Broom et al, 2006). However other research has also suggested that employment status (i.e. being in or out of work) is more

important than occupational status (the level or type of job held) for women's mental health, while for men mental health is more sensitive to occupational status (Llena-Nozal et al, 2004). But does this finding also apply to lone mothers?

Our data shows that the jobs done by lone mothers are typically part-time and in low paying occupations – around one in three employed lone mothers work in personal service or sales occupations, and a further 25% in administrative jobs. But our results suggest that this does not appear to limit their mental health benefits from work. **Table 1** shows that in 2003–08, being employed in seven out of nine occupational categories reduced the probability of depression by between 12 and 19% compared to not working. Just two occupational categories showed no statistically significant association with depression, being employed in skilled occupations and working as a machine operative, and machine operatives were the only group for whom the association was positive.

Moreover, working in professional and managerial occupations had no greater influence on reducing the risk of depression than working in administrative or service sector jobs. Partnered mothers, on the other hand, were more sensitive to occupational status, with those in lower occupational grades having smaller mental health gains to work. The results suggest that for lone mothers work matters, with jobs, and not just 'careers', being important to mental well-being.

**TABLE 1: IS ANY JOB BETTER THAN NO JOB?
THE INFLUENCE OF OCCUPATION ON DEPRESSION: MARGINAL EFFECTS FROM A MULTINOMIAL LOGIT MODEL**

	Lone mothers		Partnered mothers	
	1993–98	2003–08	1993–98	2003–08
Managers	0.04	-0.12**	-0.045	-0.07**
Professionals	-0.04	-0.13*	-0.04	-0.05*
Associated professional	-0.01	-0.13**	-0.01	-0.05*
Administrative	-0.04	-0.19**	-0.06**	-0.08**
Skilled occupations	-0.17*	-0.13	-0.11**	-0.06
Personal services	-0.02	-0.14**	-0.08**	-0.04*
Sales	0.03	-0.15**	-0.06*	-0.04
Machine operatives	-0.11	0.07	-0.01	-0.06
Elementary occupations	-0.12*	-0.13*	-0.07**	-0.01

Note: Reference category = not employed. Standard errors are clustered on the individual and are robust. Data is weighted using cross-sectional weights. The model also includes controls for age, education, region and individual year dummies. Only lone mothers who have been single for one year or more are included in the models * p<.05, ** p<.01.

Job satisfaction and job characteristics

It is well documented that job satisfaction is considerably higher among women than might be expected given their objective employment conditions (Clark, 1997). Our results suggest that for lone mothers this is particularly the case. We find that while the share of working lone mothers who were *depressed* fell substantially in the decade to 2003/08, the proportion *dissatisfied* with their work showed little change over the decade. Moreover, lone mothers were less likely to be dissatisfied with work than men or childless women. Relatively low levels of job dissatisfaction among lone mothers in part reflect working hours; with lone mothers working part-time less likely to be dissatisfied with work than those in full-time jobs. Indeed, full time employed lone mothers had similar rates of job dissatisfaction to men.

The BHPS data also asks respondents how satisfied they are with various aspects of their job. There are surprisingly few differences in the main sources of job dissatisfaction between lone parents and other groups, with pay being the most common source of unhappiness.

While the share of lone mothers that are dissatisfied with work has barely changed over the decade, there has been a substantial decrease in the share depressed. Evidence from other studies has shown that job satisfaction holds a statistically significant relationship with overall happiness and mental well-being (Layard, 2004; Faragher et al, 2005). So what might explain these apparently contradictory movements in these indicators?

One explanation may be that happiness with work matters less to lone mothers' mental well-being than it does for other workers. We explored whether this may be the case by examining the correlation between depression and job dissatisfaction for lone mothers and other workers. The results suggest a weaker association between depression and job dissatisfaction for lone mothers than for men or childless women, but only when they work part-time. For those in full-time jobs, dissatisfaction with work bears a stronger

relationship to depression, with correlation coefficients similar to those for male employees, and higher than for mothers with partners.

For lone mothers then, "job quality" does appear to bear an important relationship with overall well-being where work is full-time. By contrast, for those who work part-time, job quality is somewhat less important to mental well-being than for other groups of workers.

When we conducted multivariate analysis to examine how job characteristics influence: (i) job dissatisfaction and (ii) depression, the results show a different relationship for lone mothers and mothers with partners to those for men and childless women, as **Table 2** shows. In particular, characteristics including wages; receiving an increment; promotion opportunities; occupation; evening and night work; and constraints on working hours significantly influence job dissatisfaction and depression for men and women without children. But for lone mothers, many of the objective job characteristics that influence job dissatisfaction and depression for other workers do not appear to matter – factors such as occupation and wages appear to bear little relation to overall job dissatisfaction or to depression. However, one factor does stand out as mattering to lone mothers' well-being at work: working longer hours than desired and working unpaid overtime has a strong relationship to both job dissatisfaction and depression.

Overall, it seems that changes in job characteristics and in job quality can shed little light on why depression at work has changed so rapidly over the last decade for lone mothers. Job dissatisfaction amongst lone mothers has shown little change over the period and hours constraints – the only job characteristic that has a significant impact on the risk of depression – also saw little movement. These findings lend further support to the notion that wider policy changes, rather than changes in the quality of jobs done by lone parents, appear to have been the main driver behind the falling incidence of depression among those that work.

TABLE 2: THE RELATIONSHIP OF JOB CHARACTERISTICS TO JOB DISSATISFACTION AND DEPRESSION FOR LONE MOTHERS, PARTNERED MOTHERS, WOMEN WITHOUT CHILDREN AND MEN

	Job dissatisfaction						Depression					
	Lone mothers		Partnered mothers		Women no kids	Men	Lone mothers		Partnered mothers		Women, no kids	Men
	Part-time	Full-time	Part-time	Full-time	Full-time		Part-time	Full-time	Part-time	Full-time	Full-time	Full-time
Hours of work												
Paid overtime	0.00	-0.03**	0.01	0.00	-0.01 ⁺	-0.02**	0.01	0.03	0.00	-0.02	0.01	-0.02**
Unpaid overtime	-0.01	0.00	0.01	0.01	-0.01 ⁺	-0.02**	0.14*	0.08*	0.01	0.01	0.01	0.00
Prefer to work less	0.08*	0.08**	0.07**	0.05**	0.08**	0.07**	0.03	0.08**	0.06**	0.04**	0.05**	0.04**
Prefer to work more	0.03	0.02*	0.01	-0.01	0.04**	-0.02**	0.01	-0.11	0.03 ⁺	0.07	0.05**	0.04**
Work evenings and/or nights	-0.02	0.00	0.00	0.02 ⁺	0.02*	0.01*	-0.04	-0.03	0.00	0.00	0.02 ⁺	0.01*
Rewards and remuneration												
Log wage	-0.01	-0.01	0.06	-0.02	-0.00*	-0.06**	-0.04	0.08	-0.01	0.04	-0.04**	-0.01
Receives wage increment	-0.01	-0.01	-0.01	-0.02*	-0.03**	-0.03**	-0.03	-0.02	0.01	-0.02	-0.03**	-0.02**
Receives bonus	0.03	-0.02*	-0.04 ⁺	-0.02	0.00	0.00	-0.02	0.00	-0.01	0.00	0.01	-0.01
Job has promotion opportunities	-0.08**	-0.02**	-0.07**	-0.04**	-0.06**	-0.07**	0.03	-0.06*	0.00	-0.01	-0.02**	-0.03**
Occupation (compared to elementary, operative and skilled)												
Managerial or professional	0.01	0.00	0.02	-0.01	-0.02*	-0.01 ⁺	0.10	-0.06	0.01	-0.01	0.03*	0.02**
Associated professional	-0.03	0.00	0.03	-0.01	-0.02 ⁺	-0.02**	0.03	-0.02	-0.02	0.01	0.01	0.02 ⁺
Administration	-0.03	0.01	0.05	0.01	0.01	0.04**	-0.01	0.04	-0.01	0.03	0.03**	0.04**
Personal service	-0.05	-0.01	0.01	-0.03	-0.02	0.00	0.06	0.03	-0.01	0.02	0.00	0.02*
Sales	0.01	0.02 ⁺	0.17**	0.02	0.00	0.03*	-0.04	0.04	-0.01	0.01	0.03*	0.02
Temporary job	0.07 ⁺	0.02	0.07	0.03	0.01	0.04**	0.03	0.09	0.00	0.00	0.00	0.02*

Note: The estimated coefficients show the change in probability of (i) being dissatisfied with work, (ii) being depressed as a result of a unit change in the explanatory variables. The estimates are computed from a fixed effects linear probability models (cross-sectional estimates produce similar findings). Significance levels are *+ $p < .10$, * $p < .05$, ** $p < .01$. Sample sizes are respectively for the job dissatisfaction and depression models 1,306 (1,290) part-time and 1,274 (1,255) full-time lone mothers; 7,660 (7,605) part-time and 5,331 (5,269) full-time partnered mothers; 23,076 (22,788) women without dependent children and 34,406 (34,000) men. Controls are also included for year, region, age, education, children under five, physical illness, being in housing arrears, log of income, having a trade union at workplace, firm size, job tenure and job sector.

Evidence from the qualitative sample

The qualitative interviews aimed to gain a deeper understanding of how work might be related to depression by exploring areas that could not be examined using quantitative data. In order to get to grips with this question we sampled only those who had some experience of poor mental health. Consequently, our findings only relate to those experiencing poor mental health, and do not reflect the experience of a random sample of lone mothers.

These individual interviews allowed us to explore what lone mothers thought were the links between mental health and employment, and also to provide more up-to-date evidence than the findings from the quantitative phase of the study (which relied on earlier data, up to 2008) in light of a changed policy and economic environment. Interviews took place in June 2011, and we were particularly keen to explore the effects of changes in welfare to work policy and the impact of the financial downturn on lone mothers' well-being.

A total of 20 lone mothers were interviewed, drawn from a sample from Gingerbread's membership. Half of the sample was employed and half were out of work. The sample was drawn in such a way as to ensure that there were no significant demographic differences between these two groups, in terms of age, number of children, etc. All those in the sample were defined as being at high risk of depression using the General Health Questionnaire 12 definition of "caseness". However, not all of those interviewed identified themselves as depressed, something which is commonly found elsewhere. For example, the OECD (2012: pp205) notes "people are often unaware of their mental illness" and "even if they are aware they will often choose not to disclose their problems." Although all qualitative respondents had been identified using the GHQ12 as being at high risk for depression, when contacted some reported that their mental health was fine. In order to preserve confidentiality the names linked to the quotes below are not the respondents' real names.

'Mental ill-health' was defined by respondents variously as 'depression', 'being stressed out', 'feeling low' or 'being down'. A significant proportion of the lone mothers self-identified as having been prescribed medication to deal with their mental ill-health, with very little other support being offered in most cases. There were very few reported cases of non-employment being caused by mental health problems whilst in work, a fact supported by the quantitative evidence which

suggested very little difference in job turnover between those lone mothers that were depressed and others.

Overall the lone mothers (both working and non-working) interviewed spoke very positively of the benefits that employment could or did bring to them and their families. In addition to the financial benefits, respondents highlighted the benefit of the social interaction with colleagues and other adults; the break that working provides for them from their caring role at home; as well as job satisfaction and a sense of achievement, reinforcing the findings from the quantitative work which suggested high levels of job satisfaction among lone mothers.

"Being at work helps. People to talk to, adult company, change of environment and job satisfaction"

(Hannah, 46–50, three-year-old child, works full-time)

"I think being in work is a good release from the strains of being a single parent. Spending a couple of hours as me and not being labelled as a single mummy is very important for my mental state"

(Patricia, 36–40, 12-year-old child, works part-time)

Conversely, being out of work was generally seen by both working and non-working respondents as being isolating and leading to a sense of failure, due to not 'providing' for the family.

"Being out of work is the most belittling thing that can ever happen to a woman, where you are made to feel worthless and like you've failed at everything"

(Tracey, 51–60, nine-year-old child, not working)

However, a major tension identified was the 'role strain' that could come with being a lone parent in work. Working lone mothers attributed their poor mental health to this strain of juggling work and their caring responsibilities, while non-working lone mothers cited concerns about this role strain

as one of the main reasons not to work. All of the working respondents were trying to find a balance between working and having the time to care for their children. How parents wanted to fit these two roles together varied enormously between individuals, as did their level of success in doing so. Many of those interviewed spoke about not being able to achieve the right balance – and ending up feeling that they were failing at both tasks as a result.

“Being the only breadwinner for your children is a huge strain. Giving up work is not an option but the sacrifice is for your children not to have valuable time with you”
(Jenny, 41–45, 11-year-old and 14-year-old children, works full-time)

“Being in work is a struggle with young children. I feel pulled in both directions, firstly wanting to be a good mum and be available, but I have to keep a roof over our heads so I have to work and often feel pressurised to commit to more and more work”
(Emma, 36–40, three-year-old child, works full-time)

For lone mothers in work, particular factors contributing to poor mental health included having an employer with little understanding of the issues faced by lone parents and whose policies and practices made it harder – not easier – for lone parents to balance work and caring; and job uncertainty during the economic downturn. This led to family finances being squeezed due to wage freezes and job cuts, which in turn led to increased pressure on lone parents.

“Working for a non-supportive employer with the fear of losing my job is affecting my mental health”
(Stella, 36–40, eight-year-old child, works full-time)

“It can be quite stressful trying to keep a job in this current climate and trying to raise two kids on your own”
(Jenny, 41–45, 11-year-old and 14-year-old children, works full-time)

Those out of work also felt they were coming under increasing pressure, not only from the worsening economic climate but also because of the changed welfare to work regime (since November 2008 the Lone Parent Obligations policy has introduced a much stronger work conditionality regime for successive groups of lone parents, dependent on the age of their youngest child). They now felt under more pressure than ever before to move into work regardless of the types of jobs available (if any at all). They also felt that the process of claiming benefits in itself was detrimental to their mental health, in particular in light of toughening government and media rhetoric about benefit ‘scroungers’, as was the increasing debt many were finding themselves in. Levels of

Penny, working lone parent with four children

Penny has four children. She raised her eldest daughter on her own until she re-partnered and had four more children, but she then separated from her husband after their youngest child was stillborn. Although she would have liked to have spent more time with the children she knew having a break in employment would mean she might be further from the job market when she wanted to get back into work, so she now works as a part-time administrative assistant in a small company.

Penny says that work brings her personal benefits, particularly in giving her a break from home: *“When you’re at home it’s constant and you’re responsible for anything that happens, whether it’s a bill, childhood activity or them having a friend over. You are the one who’s in charge all the time. Whereas when you’re at work you don’t have to be that person, you can be more relaxed.”*

While she also welcomes the income that work brings, Penny still finds it a struggle to manage financially, and would like to increase her hours and her income. *“At times I feel a bit down, when my kids ask for something and I can’t give them it. What I really need is to move into a job with more hours and money that will lead into a career, but at the moment there aren’t the jobs out there.”*

debt and financial hardship were said to have increased due to an increase in living costs and the overall constrained economic environment.

“It makes me scared knowing that my benefit may be taken away from me and I could be forced into work, which would make my depression even worse”
(Cheryl, 41–45, seven-year-old and 11-year-old children, not working)

Lone mothers not in work were well aware of the benefits that employment could offer them, but were particularly nervous about being forced into work which did not fit around their caring responsibilities. While they were, in most cases, willing to take on at least some work, the perceived lack of suitable jobs (or suitable hours) made the prospect of the job-search environment and conditionality regime more difficult for them. Some of those lone mothers not currently in work were also conscious that the time they had spent

away from the labour market and their (lack of) skills and employment experience would make it even more difficult for them to find work.

“Since being unemployed my anxiety’s become much worse. I am now suffering from depression and on tablets with worrying about paying bills, keeping the roof over my child’s head and how to make ends meet with so little money”

(Chloe, 36–40, 11-year-old and 13-year-old, not working)

“I think it’s very demoralising the stereotypical image of the single parent as someone who actually enjoys not working. This would have a big impact on the mental health of anybody in that situation”

(Tracey, 51–60, nine-year-old child, not working)

Finally, all lone parents spoke about the stigma they experienced due to their family status. They all spoke of the negative rhetoric about lone parents which they felt came from both government and the media. Lone mothers thought they were seen as a drain on society, something to be ‘discouraged’ and often depicted as ‘scroungers’, regardless of whether or not they were in work. This was something they felt had increased in recent years, and in many cases had a negative effect on their mental health.

Summary and discussion

The question of how employment influences the mental health of mothers is an important one, with implications for family and social policies – should government push mothers into work, or should mothers be encouraged towards more traditional roles? The results from our study suggest that, for lone mothers, work has the potential to play a very important part in influencing mental health.

These effects are greatest under a policy environment which supports and encourages lone mothers to balance work and care. Welfare reforms which have rewarded and supported work may also have had a positive influence on mental health because they have promoted changes in attitudes towards lone parents and work, and may therefore have had an indirect impact on the mental health of lone mothers who work. However, under a less supportive policy environment, where ‘push’ rather than ‘pull’ factors influence lone mothers’ employment decisions, the mental health benefits of work may be limited, as was the case in the mid-1990s prior to welfare reform.

Our study reinforces findings from other studies which have shown that welfare reform has been associated with improvements in lone mothers’ mental health both in the UK (Gregg et al, 2009) and US (Herbst, 2012). This study adds to our understanding of this change by showing that these gains in well-being were a result of better mental health outcomes among *working* lone mothers which occurred alongside increases in employment levels. Indeed the change in the relationship between work and mental health was so large that it meant that by the mid-2000s the negative impact of lone parenthood on mental health was almost entirely offset where lone mothers worked: in 2003/08 working lone mothers had no greater chance of depression than married or cohabiting mothers, and being in work reduced this risk by between 16 and 18 percentage points compared to being out of work. This was in stark contrast to a decade previously when work and positive mental health showed little association; both those in and out of work were at very high risk of depression.

For partnered mothers, work is also associated with a reduced risk of depression, although the effects are much smaller than for lone mothers, and there is little change in this relationship over the decade. Indeed, the absence of similar gains in mental health among other groups adds considerable support to the notion that changes to the welfare system can plausibly explain the changing relationship between work and well-being among lone mothers.

For lone mothers the gains to work have been seen across job types – employment in mini jobs, part-time and full-time work have all been associated with a lower incidence of depression compared to being out of work. Moreover, the research suggests that supporting lone mothers to work matters for reasons over and above any financial gains to employment. Yet there remain concerns about the quality of jobs lone mothers do. The wider literature on work and mental health suggests that the beneficial influence of work on mental health can be offset where jobs are poor quality, with occupations including clerical jobs, sales and service occupations which have “high psychological demands with low decision latitude” likely to lead to job strain, a driver of poor mental health which is considered particularly detrimental (OECD, 2012).

For lone mothers the relationship between job quality and mental health appears to be weaker, with the mental health benefits of employment extending beyond those working in “good” jobs. Our analysis of the mental health gains to work show that for lone mothers there are gains across the occupational spectrum, with “jobs” – including those in services and sales – rather than just “careers”, mattering for mental well-being. These findings are echoed by Herbst (2012) and Edin and Lein (1997), who find that welfare reform in the US led to better mental health among lone parents in spite of limited income gains and continuing concerns over job quality and low wages.

For lone mothers, factors including flexibility over working hours and not working longer hours than desired are much more significant for better mental health than wages and career opportunities. Recent policy initiatives have placed substantial emphasis on improving the health of those in work (see for example the Black Review, 2008). However, these reviews have to date paid little attention to the particular circumstances, constraints and pressures on lone mothers. Greater attention to the factors that matter most for lone mothers – in particular understanding and flexibility around working hours – will be essential for maintaining continued improvements in mental health. In this context, it

is important to address both national employment policy – which frames the legislative context in which lone parents seek and take up work – as well as the specific flexible working policies and approaches of employers, which play a significant role in determining the flexibility around working hours that lone parents experience in practice.

The data we analysed for this study examined the labour market and policy environment to 2008. Since then the recession and a hardening policy environment will have considerably changed the context for lone parents both in and out of work. A continuing weak job market together with policy reforms which increase the pressure on non-working lone parents to find jobs, and which reduce the support available for those in work, may push up the rate of maternal depression in the coming years.

As our research shows, the link between employment and improvements in mental well-being is not an automatic one – in the absence of an enabling policy environment, mental health benefit from work may not be achieved, as was the case in the mid-1990s. For those that are out of work the incidence of depression appears to be worsening and this might reflect the increasing expectation of lone parents to work in the period up to 2008. Further changes to policy in recent years – and in particular the strengthening of the conditionality regime – might be expected to further exacerbate the already high levels of depression among lone mothers who do not work, particularly when viewed against the backdrop of a slow and difficult labour market.

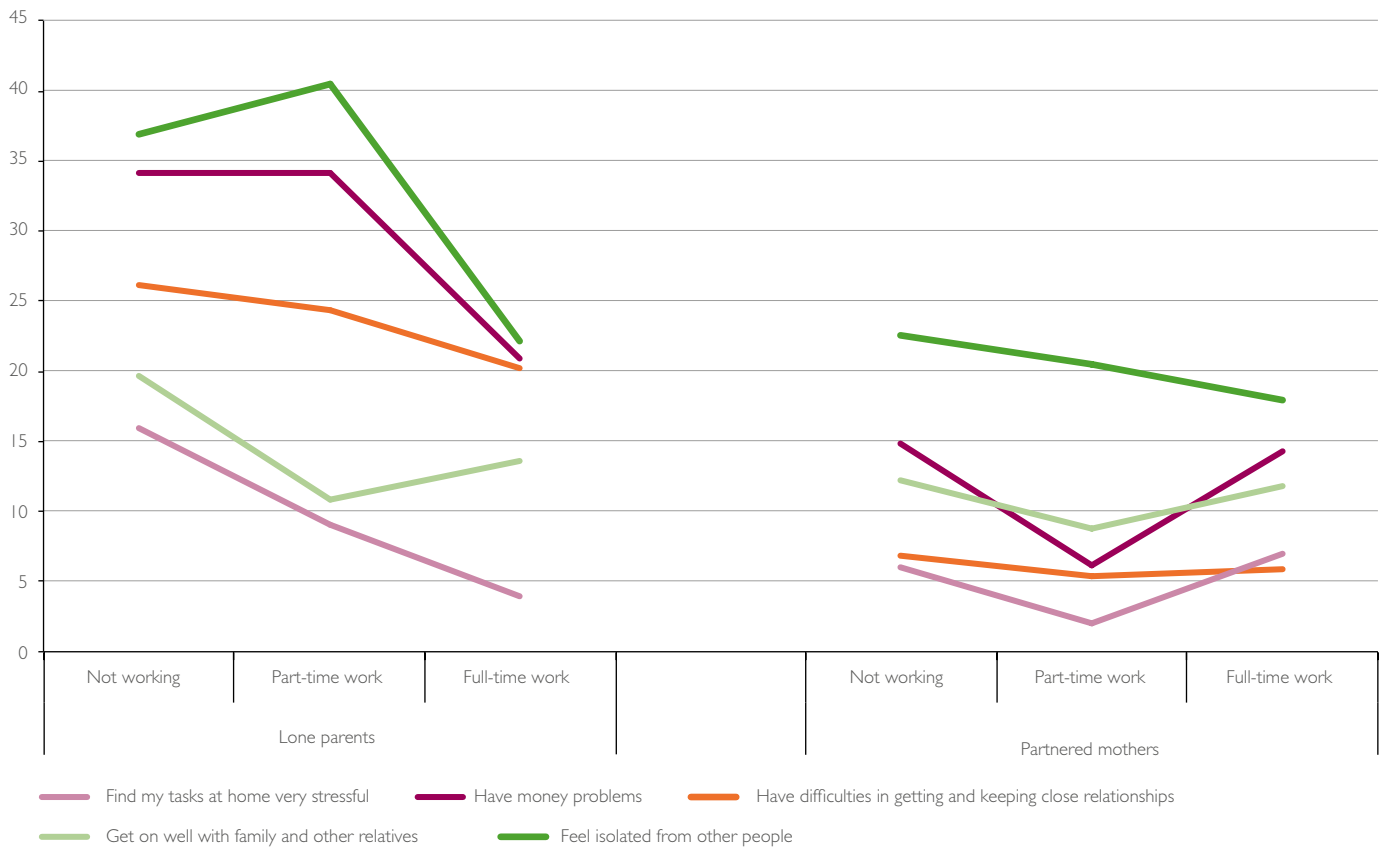
References

- Baker D and North K (1999). Does employment improve the health of lone mothers? The ALSPAC Study Team. Avon Longitudinal Study of Pregnancy and Childhood. *Social Science and Medicine* 49(1):121–31.
- Black C (2008). *Working For a Healthier Tomorrow: Dame Carol Black's Review of the Health of Britain's Working Age Population*. Department for Work and Pensions, London:TSO.
- Broom D H, D'Souza R M, Strazdins L, Butterworth P, Parslow R, and Rodgers B (2006). The lesser evil: Bad jobs or unemployment? A survey of mid-aged Australians. *Social Science & Medicine* 63 (2006) 575–586.
- Clark A E (1997). Job satisfaction and gender: Why are women so happy at work? *Labour Economics* 4(4), 341–372.
- Dragano N, Ying H, Moebus S, Jockel K, Erbel R, and Siegrist J (2008). Two models of job stress and depressive symptoms. *Social Psychiatry and Psychiatric Epidemiology* 43(1), 72–78.
- Edin K and Lein L (1997). *Making Ends Meet: How Single Mothers Survive Welfare and Low-wage Work*. Russell Sage Foundation, New York.
- Evans M, Harkness S, and Ortiz R (2004). *Lone parents cycling between work and benefits*. Department for Work and Pensions, Research Report No 217, London.
- Faragher E B, Cass M, Cooper C L (2005). The relationship between job satisfaction and health: a meta-analysis. *Occupational Environmental Medicine* 2005;62:105–112.
- Gregg P, Harkness S, and Smith S (Feb 2009). Welfare Reform and Lone Parents in the UK. *Economic Journal* 119(535): F38–F65.
- Herbst C M (2013). Welfare reform and the subjective well-being of single mothers. *Journal of Population Economics* 26(1): 203–238.
- Ichfer J (2011). The Happiness of Single Mothers after Welfare Reform. *The B.E. Journal of Economic Analysis & Policy* 11(1):1–27.
- Hakim C (2003). A New Approach to Explaining Fertility Patterns: Preference Theory. *Population and Development Review* 29(3): 349–374.
- Helliwell J and Huang H (2011). *New Measures of the Costs of Unemployment: Evidence from the Subjective Well-Being of 2.3 Million Americans*. NBER Working Paper No. 16829.
- Hirsch D and Millar J (2004). *Labour's welfare reform: Progress to date*. York: Joseph Rowntree Foundation.
- Kahneman D and Deaton A (2010). High income improves evaluation of life but not emotional well-being. *Proceedings of the National Academy of Science*. USA advance online publication doi: 10.1073/pnas.1011492107.
- Kiernan K and Huerta M (2008). Economic deprivation, maternal depression, parenting and children's cognitive and emotional development in early childhood. *British Journal of Sociology* 59(4):783–806.
- Layard R (2004). *Good Jobs and Bad Jobs*. CEP Occasional Paper No CEPOP19, London School of Economics.
- Llena-Nozal A, Lindeboom M and Portrait F (2004). The effect of work on mental health: does occupation matter? *Health Economics* Vol. 13.
- OECD (2012) *Sick on the Job? Myths and Realities about Mental Health and Work* OECD Paris.
- Repetti M and Waldron K (1989) Effects of Paid Work on Women's Mental and Physical Health. *American Psychologist* 44 (11) 1394–1401.
- Rowlingson K and Millar J (2002). Lone parents, poverty and work: policy approaches and lessons from abroad. *Benefits* 10, pp. 207–213.
- Targosz S, Bebbington P, Lewis G, Brugha T, Jenkins R, Farrell M and Meltzer, H. (2003). Lone mothers, social exclusion and depression. *Psychological Medicine* 33(04), 715–722.
- Wang J L, Lesage A, Schmitz N and Drapeau A (2008). The relationships between work stress and mental disorders in men and women: Cross-sectional findings from a population-based study. *Journal of Epidemiology and Community Health* 62(1), 42–47.
- Winkelmann L and Winkelmann R (1998). Why Are the Unemployed So Unhappy? Evidence from Panel Data. *Economica*, 65 (257), 1–15.
- Wittchen H U, Jacobi F, Rehm J, Gustavsson A, Svensson M, Jönsson B, Olesen J, Allgulander C, Alonso J, Faravelli C, Fratiglioni L, Jennum P, Lieb R, Maercker A, van Os J, Preisig M, Salvador-Carulla L, Simon R, Steinhausen H C (2011). The size and burden of mental disorders and other disorders of the brain in Europe 2010. *European Neuropsychopharmacology* (2011) 21, 655–679.
- Zimmerman F J and Kanton W (2005). Socioeconomic Status, Depression Disparities, and Financial Hardship: What Lies Behind the Income – Depression Relationship? *Health Economics* 14(12).

Appendix

Alternative measures of well-being and employment status for lone and partnered mothers

(I) SOCIAL FUNCTIONING



(II) LONE PARENTS MENTAL HEALTH SYMPTOMS AND EMPLOYMENT STATUS

	Not working	Part Time	Full Time
Fatigue	49.1%	39.7%	34.0%
Sleep problems	46.4%	42.2%	35.3%
Worry	39.9%	30.3%	22.6%
Irritability	37.9%	28.3%	24.2%
Depressive ideas	28.6%	15.1%	11.7%
Depression	28.0%	11.7%	8.5%
Forgetful	22.7%	15.3%	16.6%
Anxiety	20.3%	12.8%	9.8%
Somatic	18.4%	10.2%	5.7%
Phobias	17.3%	10.1%	8.1%
Obsession	16.6%	11.8%	2.3%
Compulsions	11.3%	8.4%	5.3%
Worry	10.3%	12.0%	5.2%
Panic	8.0%	4.4%	4.5%

Note: Data is from the 2007 Psychiatric Survey of Morbidity. Sample sizes are 384 lone mothers (with samples of 185, 109 and 95 not-working, part-time and full-time respectively) and 763 mothers in couples (with 229, 313 and 221 not in work, part-time or full-time).



Published by the Nuffield Foundation, 28 Bedford Square, London WC1B 3JS
Copyright © Nuffield Foundation 2013
ISBN 978-0-904956-90-0

This briefing paper is also available to download at www.nuffieldfoundation.org