Investigation of biases in decision making concerning young mothers by health and social care professionals.

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Research Summary

This study aimed to assess whether the mistrust of and perceived judgement by professionals and services reported by some young mothers, and well documented in the literature, is a valid concern and, in doing so, consider the impact that such a bias may have on care and outcomes for both the mother and child.

Professionals working in health and social care saw a short vignette describing an ambiguous situation in which there may be cause for concern about the child's development and the mother's mental health. The age and socioeconomic status (SES) of the mother in the vignette was varied across participants, who were asked to rate their understanding of the situation in terms of their causal attributions, as well as explicit judgements about extent of concern and parenting ability. Qualitative responses regarding influential factors and appropriate next steps were also elicited. A total of 275 professionals took part.

There was no evidence that young maternal age meant that professionals exhibited greater concern for the child's welfare. However, there was some evidence that initial impressions of the mother's parenting capacity were lower when the mother presented in the vignette was a teenager and this appeared to reflect some bias on the part of professionals. Concern for the teenage mother's welfare was also elevated compared to her older counterparts. Disadvantaged maternal SES was associated with greater concern for the welfare of both mother and child. Overall, there was a lack of significant influence of mother's age or SES on causal attributions, indicating that these may be of limited utility in exploring how professionals understand and make decisions about mothers and children with whom they interact. Implications of these finding are discussed in light of the influential factors identified by professionals and their suggested next steps and support plans.

Chapter 1: Introduction

Chapter Overview

This chapter begins by defining what is meant by the term 'young mother' in the context of this thesis. A summary of recent political context and policy concerning young motherhood in the UK is then provided and statistics are considered across time. Research regarding adverse outcomes associated with young motherhood, both for the mothers and their children, is critically explored, arguing that the reported outcomes need to be considered in the context of the prior risk factors and opportunities available to many of the young women who become mothers while still teenagers. Mental health is highlighted as an area of particular concern for teenage mothers and as a potential mediating factor with influence from and on other reported risks. The social context and stigmatisation of teenage motherhood is then described, with consideration of the bearing this may have on engagement with services. Finally, the possibility and potential impact of prejudice and bias towards young mothers by health and social care professionals is considered, before the rationale and objectives of the research study reported in this thesis are presented.

Definition of Young Motherhood

There are varying definitions of the age range encompassed by the terms 'young', 'teenage' or 'adolescent' mothers, which are frequently employed interchangeably. Most typically, they are defined as women who become mothers before the age of 20 years (e.g. National Institute of Clinical Excellence, 2010), however the term is also used to specify mothers under the age of 18 years (Office for National Statistics [ONS], 2020; United Nations Children's Emergency Fund [UNICEF], 2001). Further distinctions may also be made between mothers under or over 16 years of age, while the very small but steady percentage getting pregnant at or below 14 years (approximately 5% of all under 18

conceptions) may also be portioned out (ONS, 2014, 2020). Additionally, the upper limits may be differentially applied according to age at time of conception or at time of birth (ONS, 2020a; UNICEF, 2001). Occasionally, young parenthood is applied to parents up to 24 years of age, although this definition is rarely used interchangeably with the teenage or adolescent descriptors. This higher age limit is more commonly applied to fathers since approximately half of the fathers of babies born to teenage mothers are men between 20 and 24 years of age (Public Health England [PHE], 2019).

For the purposes of this thesis, the terms 'young', 'teenage' and 'adolescent mother' will be used interchangeably to refer to those who have become mothers whilst aged 19 years or under, unless otherwise specified. It is recognised this is a somewhat arbitrary cut-off since some evidence suggests that the needs of mothers in their early twenties may more closely resemble their younger counterparts than mothers giving birth later in life (Action for Children, 2017). However, this definition closely parallels most of the literature, as well as guidance and policy in the UK, including eligibility for support aimed at young mothers such as support groups and childcare grants¹.

Political Context in the UK

Reducing teenage pregnancy and parenthood has been a particular focus of UK policy for the last two decades, since being positioned as a central target for intervention in the Teenage Pregnancy Strategy for England following a comprehensive report examining influences and outcomes associated with teenage pregnancy and parenthood published by the Social Exclusion Unit (SEU, 1999). This was one of several flagship policies developed by

https://www.gov.uk/guidance/care-to-learn-guide-2021-to-2022-academic-year

 $^{^{\}rm l}$ e.g., the Care to Learn grant for childcare costs when returning to education:

New Labour for reducing social and health inequality, which they argued had increased because of the individualism that proliferated under the Thatcher and Major governments of the 1980s and 1990s. This individualism, Labour asserted, cultivated a lack of respect in society whilst failing to recognise inequality of opportunity, resulting in increasing antisocial behaviour and inadequate protection for the most vulnerable in society. New Labour's solution was a set of policies aimed at reducing poverty and social exclusion alongside enhanced oversight and protection through coordinated efforts between services to identify and meet needs. Policies focused on reducing inequality of opportunity and associated low aspirations, identified as factors perpetuating lifelong disadvantage and intergenerational cycles of deprivation. Teenage pregnancy was highlighted as a key area for intervention to improve outcomes for both the parents and their children and to reduce a cycle of welfare dependence and poor educational and economic attainment.

Overseen by a special taskforce within the SEU, the Teenage Pregnancy Strategy was a ten-year initiative coordinating a national effort to decrease conceptions among women under eighteen years of age by 50% in conjunction with strategies to reduce social inequality among those that did become parents to interrupt the identified cycle of young parenthood and social exclusion. This included policies to increase access to sexual health services and education as well as funding and services to support young parents to continue in education or training and reduce isolation, such as the *Care to Learn* grants for childcare. This initiative was complemented by wider policies aimed at reducing social inequality and improving wellbeing for vulnerable children and their families, all of which fit within Labour's overall goal for reducing child poverty (for a more detailed overview see Piachaud & Sutherland, 2001). These included *Every Child Matters* (HM Treasury, 2003), which was an agenda outlining reforms to child protection, childcare and early intervention in the wake of the failures to protect vulnerable children who had fallen through the gaps between services, and

the *Sure Start* initiative, introduced to coordinate early intervention for children under four and their families in England (HM Treasury, 1998). The latter developed into children's centres run by local government, set within deprived communities, and had an outreach remit to proactively engage the most vulnerable families, with teenage parents and their children being one such target group (Department for Education and Skills [DfES], 2003; HM Treasury, 2004; for review of changes over time see Bate & Foster, 2017). Centres focused on improving outcomes through providing holistic support during infancy and preschool years, including health clinics, playgroups and childcare, parenting support groups and interventions, financial advice, and signposting to other services. Evaluations of the Sure Start initiative identified significant impacts, both for families in terms of physical and mental wellbeing, child development and parenting skills, as was well as savings to the NHS and other public services (Cattan et al., 2019; National Evaluation of Sure Start Team, 2010, 2012; Sammons et al., 2015; Smith et al., 2014).

Nevertheless, while explicitly the strategy aimed to address inequality and exclusion, by setting up teenage parenthood as a key societal and public health problem, teenage parenthood was characterised as undesirable and economically reckless. Teenage mothers by extension were portrayed as unsuitable mothers making irresponsible choices leading to both personal disadvantage and public cost. This public perception and judgement of teenage parents as unsuitable and a drain on the public purse is clear in the stated public finance saving of £4 for every £1 spent on the strategy, in terms of the costs to NHS and welfare services avoided. Furthermore, implicit in the evaluative assertion that decreasing teenage pregnancy rates demonstrated that increasing support available for young parents had not 'encouraged' teenage parenthood (Department for Children, Schools and Families [DfCSF], 2010), is an acknowledgement of public concern that those who become young parents may do so deliberately in order gain access to welfare at cost to the taxpayer.

As the initial ten-year strategy term ended, the Labour government emphasised the continued focus and importance of reducing teenage pregnancy and parenthood in a document reviewing the initiative and setting out future plans (DfCSF, 2010). This document reported a 13.3% decrease in the conception rate for women under eighteen years of age with a 25% reduction in birth rate since 1998, acknowledging this fell short of the 50% target reduction in conception rates. For those who did become mothers, there was an increase from 22% in 1999 to 33% of teenage mothers accessing education, employment or training, with 73% of young parents accessing the Care to Learn grants reporting they could not have returned to education without this (also Riley et al., 2010). The document further reemphasised the importance of 'Targeted Youth Support' with pre-emptive interventions aimed at raising aspirations for those most at risk of becoming young parents, with low aspirations understood to have a direct impact on negative outcomes in line with the *Aiming High for Young People* agenda (HM Treasury, 2007).

The importance of multi-agency coordination and an accessible and welcoming approach was highlighted as key for engaging and improving outcomes for those who did become parents, with the suggestion that a lead professional can become a 'critical friend' for enabling young parents to navigate services and support (DfCSF, 2008, 2010). To this end, the document announced the widening of a Family Nurse Partnership model, under which a named nurse undertakes home visits starting in pregnancy and continues up until the child is two years old, providing consistency needed for building a relationship and enabling better coordination of multiple services. A national Teenage Pregnancy Knowledge Exchange was also set up to collate and share information and provide training and consultancy for services, alongside various tools and guides aimed at enhancing service provision for pregnant and parenting teenagers (DfCSF, 2008, 2010).

The change of government in 2010, with a Conservative-Liberal Democrat coalition followed by subsequent Conservative majorities and the 'austerity years' following the economic crash in 2008, resulted in changes in the focus of such policies. Substantial and prolonged cuts to public spending were argued to be necessary to address the financial deficit left by the recession and the bailing out of the banks (Conservative Party, 2010). The impact of these cuts, inevitably, has been greatest in areas of higher deprivation, where need for public services and state aid is greatest. In particular, many Sure Start Children's Centres were closed, with government funding decreasing by 55% between 2010 and 2016 amongst widespread concern that the benefits these centres and related funding and policy had achieved were being eroded by the cuts to welfare and public services (Action for Children, 2016; British Medical Association, 2013; Sammons et al., 2015; Stewart & Obolenskaya, 2015; Torjeson, 2016). Wider serious impacts of the austerity programme are exemplified by food bank statistics, with numbers proliferating by approximately 75% in the last nine years, and the Trussell Trust, the UK's largest food bank provider, reporting a vast increase in need for three-day emergency food parcels from 41,000 in 2010 to more than two million in 2019, even prior to the impact of the pandemic (Tyler, 2021). In 2018, the United Nations (UN) Special Rapporteur issued a damning statement on the level of poverty in the UK, highlight food insecurity and the inadequacy of welfare provision, with greatest impact on the most vulnerable (Alston, 2018). The report made reference to the severe repercussions in terms of mental health and wellbeing, noting multiple accounts of hopelessness and suicide attempts.

To further justify these cuts, the welfare state was argued to have grown too large to sustain. This fit with and was justified by the rhetoric of a lack of personal responsibility for providing for one's own family and needs, propped up by an overbearing state. This was epitomised in David Cameron's concept of 'Broken Britain', which he promised to 'mend' in his election manifesto (Conservative Party, 2010). This drew on New Labour's commitment

to reducing social exclusion but represented a shift in discourse further towards failings of personal and social responsibility brought about by the 'nanny state' and the welfare dependence it created. In doing so, it treated the negative outcomes associated with social inequality as indicative of moral inadequacy, arguing that large scale social change was needed to reverse this trend. Cameron's solution was the 'Big Society', in which power would be redistributed from the state to local communities, encouraging social responsibility, community activism and rewarding those members of society who were felt to display desired behaviours and characteristics ('hard-working, pioneering, independent, creative, adaptable, optimistic, can-do'; Cameron, 2011; Conservative Party, 2010). Those who did not fit this characterisation were therefore part of the problem of 'Broken Britain', characterised by welfare dependence, high crime rates, worklessness, antisocial behaviour, family breakdown and, of course, teenage parenthood.

At the same time, government initiatives perpetuated the idea that accessing welfare support was indicative of moral failure and portrayed claimants as needing to be held accountable. New benefit sanctions, introduced in 2012 under the Welfare Reform Act (c. 5), emphasised a personal responsibility to be in work, with Conservative politicians highlighting the aim of "ending the something-for-nothing culture" (e.g. Iain Duncan Smith, cited in Mason, 2013; Esther McVey cited in Department for Work and Pensions press release, 2013). Similarly, the *Troubled Families Programme* (Department for Communities and Local Government, 2017) stated an explicit aim of reducing dependency on public services through intensive work to change behaviour in families with "multiple, high-cost problems". Through this shift in discourse, therefore, the symptoms of structural inequality became the causes, with individuals own behaviour postulated to be responsible (Slater, 2012). Applied to teenage mothers, this entrenched the stereotype of unsuitable parents who are a burden to the taxpayer.

One consequence of this intensified rhetoric, however, is that reducing teenage pregnancy has remained a focus of policy throughout, as outlined in the latest government publications regarding initiatives to reduce teenage pregnancy (PHE, 2018, 2019). In addition, a modelling tool for services to predict the likely impact of intervention on outcomes for teenage mothers and their children has been developed and the national Teenage Pregnancy Knowledge Exchange, set up under New Labour, continues to provide expert guidance. The Family Nurse Partnership programme is now offered by teams in 59 localities across England².

UK Statistics

Part of the impetus for the focus on reducing teenage pregnancy in UK policy is that the UK has consistently exhibited a higher rate of teenage pregnancy than the majority of other Western nations and continues to do so to date, with rates approximately eight times greater than the Netherlands and five times more than France (Paranjothy et al., 2009; PHE, 2018, 2019; SEU, 1999; Teenage Pregnancy Unit, 2002; UNICEF, 2013) In 1998, just before the launch of the Teenage Pregnancy Strategy, this rate was 30.8 per 1000 women aged 15 to 17 years, and second only to the USA among the 38 Organisation for Economic Co-operation and Development (OECD) countries (Kamp & McSharry, 2018; UNICEF, 2001).

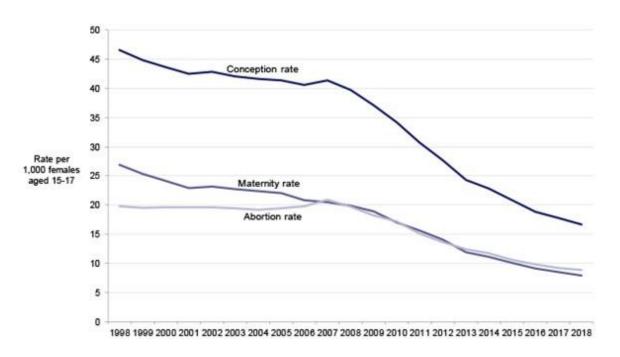
Nevertheless, statistics for the UK do show a marked reduction over time since New Labour introduced the Teenage Pregnancy Strategy. Between 1998 and 2018, there was a greater than 60% decrease in the teenage pregnancy rate, from 47 to 17 per 1000 women aged 15-17 years at conception, with an increase in the rate of this decline from 2007 (Fig. 1.1).

² As reported on the Family Nurse Partnership Programme website, https://fnp.nhs.uk/about-us/the-local-teams/, accessed on 28th July 2021.

This data does not include conceptions to females aged 14 years or under since this accounts for only around five percent of conceptions to women under 18. The latest ONS data reported a conception rate of 16.7 per 1000 women aged under 18, representing a 58% decrease between 2008 and 2018, with the 50% reduction target met by 2014 and four years later than originally planned (Hadley et al., 2016; ONS, 2020; Teenage Pregnancy Knowledge Exchange, n.d.). Of course, rates of teenage pregnancy do not convert directly into rates of births to teenage mothers, with many ending in abortion or miscarriage. However, UK data suggests the decline in conception rates between 1998 to 2018 has been matched by a similar decline in the maternity and abortion rates per 1000 females aged 15-17 years from approximately 27 to 8, and 20 to 9, respectively (Fig. 1.1; Hadley et al., 2016). Taken together, these statistics indicate that the decline in teenage maternity is not due to increased access or use of abortion.

Figure 1.1

Under 18 conception, maternity, and abortion rates in England between 1998 and 2018.



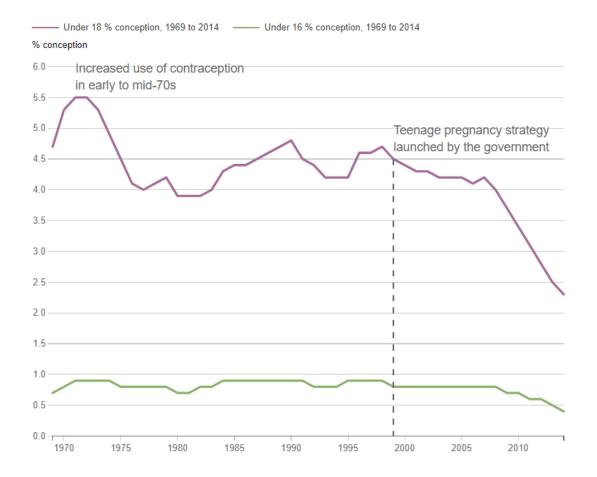
Reproduced from Teenage Pregnancy Knowledge Exchange (n.d), updated from figure produced in Hadley et al. (2016).

Given the increased focus in policy on reducing teenage pregnancy, with discourse presenting it as symptomatic of 'Broken Britain' and young mothers as unsuitable and costly to society, one may surmise that by the end of the 1990s this was an increasing problem, spiralling out of control. Indeed, public perceptions of teenage pregnancy appear in line with this conjecture. Research indicates that approximately 28% of British adults rate teenage pregnancy as a 'very big problem' with a further 43% perceiving it as a 'fairly big problem' (Ipsos MORI, 2013). However, rates of teenage pregnancy were actually far higher in the 1950s and 1960s and, even in the early 2000s, absolute numbers were less than half of the figures in the early 1970s (Duncan, 2007). National statistics show that at the time at which the Teenage Pregnancy Strategy began, rates of conception among women under 18 were already lower than at the beginning of the 1970s and had been reasonably stable for the past 20 years, including among the small minority who become pregnant before 16 years of age (Fig. 1.2). The same was true for births to mothers aged 15 to 19 years of age, which was 30.8 per 1000 women in 1998 compared to 49.4 per 1000 women in 1970. Following the decrease in teenage pregnancy rates in the 21st century to date, they are now at their lowest rate.

Despite this, research indicates that British adults do indeed vastly overestimate the percentage of women under 16 years of age who become pregnant each year by about 25 times the actual proportion (estimating 15% compared to an actual figure of 0.6% in 2013 and 23% compared to an actual figure of 0.8% in 2008; Ipsos MORI, 2013). Similarly, the percentage of 15 to 17 year olds actually giving birth each year continues to be significantly overestimated, with a 2017 survey finding that British adults erroneously believed this to be 19% whilst the actual proportion was 1.4% (Ipsos MORI, 2013).

Figure 1.2

Percentage of women aged under 16 and under 18 becoming pregnant in England and Wales in 1969-2014



Reproduced from ONS (2016).

Risk Factors and Outcomes

The other main argument underlying the emphasis on teenage pregnancy and parenthood in UK policy is the assumption that young motherhood is associated with negative outcomes and therefore that reducing early parenthood will, in turn, address social and health inequalities. These adverse consequences highlighted in policy reports include increased rates of mental health difficulties, relationship breakdown, domestic violence,

poverty, poor educational and occupational attainment, housing insecurity, lower birth weight, higher infant mortality, and developmental delay (PHE, 2018, 2019; SEU, 1999; Swann et al., 2003; Trivedi et al., 2007). To explore the validity of this position it is necessary to further consider the evidence upon which these assertions are based.

Research does indeed suggest that young mothers and their children may experience poorer outcomes compared to their older counterparts. One of the most consistently reported findings is that mental health problems are particularly prevalent among teenage mothers. Postnatal depression (PND) has been reported to be up to three times as common in young mothers compared to older mothers, with data estimating that around 40-60% of young mothers experience an episode of PND within one year of birth (Birkeland et al., 2005; Cox et al., 2008; Hudson et al., 2000; Lanzi et al., 2009; Moffitt et al., 2002; Mollborn & Morningstar, 2009; Reid & Meadows-Oliver, 2007; Schmidt et al. 2006; Siegel & Brandon, 2014). Considering potential influences on the reported increased propensity to PND, Agnafors et al. (2019) found rates were almost twice a high among teenage single mothers than among older single parents, suggesting it was not simply due to the lack of a cohabiting partner. However, it remains possible that finding other support structures may be easier for older single mothers, either because of ease of access or reduced stigma. The same study found that dropping out of education was a bigger influence on depression than age, which may in part be due to the impact of this on social isolation and self-esteem.

Several other studies lend support to these associations. Birkeland et al. (2005) reported that social support was an important factor in young mothers' wellbeing and self-confidence in their parenting ability, with parenting confidence in turn, along with body shape concerns, associated with increased depressive symptomatology. Cox et al. (2008) also found higher depressive symptoms among a group of teenage mothers attending a parenting program were related to lower self-confidence in parenting and poorer social support. Hudson et al. (2000),

similarly, reported strong significant relationships between these factors for mothers aged 16-19 years, with greater depressive symptomatology associated with lower social support and with higher ratings of loneliness. Although this latter study found no direct correlation between depression and self-esteem, self-esteem was positively associated with social support and negative with loneliness, suggesting a potential indirect pathway of influence.

In a systematic review of the literature concerning PND in teenage mothers, Reid and Meadows-Oliver (2007) concluded that increased depressive symptoms in young mothers were associated with feelings of loneliness and low self-esteem, but also highlighted a link with higher family conflict. Similarly, Buzi et al. (2015) reported that pregnant teenagers, aged 15-18 years, who presented with greater depressive symptoms were more likely to have limited contact with father of baby, prior experience of abuse, high family criticism, and low social support. Family conflict and criticism would appear likely to both add stress and reduce support. Larson (2004) found that criticism from their own parent about their childrearing was significantly associated with perceptions of parenting stress.

Social support has been found to be lower for young compared to older parents, with many young mothers reporting feeling alone and isolated (Action for Children, 2017; Cronin, 2003; Devito, 2010). Perhaps importantly, the level of support post-birth is also lower than young mothers predict, suggesting that their expectations of their support network during pregnancy are not borne out following the child's birth, while others describe judgement from previous friends (Ellis-Sloan & Tamplin, 2018; Quinlivan et al., 2004). Evidence suggests this may arise due to both a loss of shared experience with their former peers as their responsibilities shift, whilst at the same time they may find it more difficult to form new friendships or social networks after becoming a mother (Barnardo's, 2020). Young mothers may feel unaccepted and lonely among older parents, fearing judgement or being unable to relate to their experiences, and may not have access to local groups of young parents to form the peer

relationships that are so important for many women in early motherhood (Action for Children, 2017; Joseph Rowntree Foundation, 1995; Wenham, 2016).

More practical influences on isolation and stress may also be more prevalent among young mothers, with young mothers at increased risk of housing insecurity or stress, poverty and debt. Smith & Roberts (2005) highlighted how housing could be a significant source stress through pregnancy and beyond. Furthermore, young parents may frequently be housed away from their support network or in areas with poor transport links or, when opting to remain in their family home, be living in overcrowded accommodation or with high family conflict (Action for Children, 2017). Young mothers are also more likely to be living in poor quality housing and in more deprived neighbourhoods, and to be living in poverty (Action for Children, 2017; Berrington et al., 2005; Moffit et al., 2002). Teenage motherhood is also associated with increased risk of domestic violence (Harrykissoon et al., 2002; Wood et al., 2011). One UK study found that this risk was higher still when young mothers were experiencing socioeconomic deprivation, suggesting that the options for a young mother to leave the relationship are restricted and she may be financially unable to do so (Wood et al., 2011). The latter may be especially true for the youngest mothers, who cannot claim financial support prior to their sixteenth birthday and may be dependent on an older partner to do so. Stress from a variety of factors, including living situation, financial worries and relational stress, is associated with increased risk of mental health difficulties across the population (Bell, 1990; Kessler et al., 2005; Lach et al., 2011; Pevalin et al., 2017).

Associations between poor physical health outcomes and young maternal age have also been reported for both mother and child. Premature birth is approximately two and a half times more likely for teenage mothers, along with increased risk of other complications including lower birth weight and stillbirth (Balayla et al. 2,011; Fleming et al., 2013; Leppälahti et al., 2013; Khashan et al., 2010). Additionally, infant mortality is increased for children of young

mothers, and is greatest at around one and a half times for the youngest mothers (under 15 years) even compared to their older teenage counterparts (18-19 years), whilst young mothers themselves are also at higher risk of early death later in life (Otterblad Olousson et al., 2004; Phipps et al., 2002; Uzan et al., 2013; Webb et al., 2011). To some degree, birth outcomes may be accounted for by higher rates of smoking and drug and alcohol misuse during pregnancy compared to use by older mothers, as well as delayed accessing of antenatal care and poorer diets with lower use of antenatal supplements (Creswell et al., 2013; DfCSF, 2008; Fleming et al., 2013; Leppälahti et al., 2013; Moran, 2007; PHE, 2018). Many of these physical health outcomes are reduced with better antenatal care (Santos et al., 2013; Vieira et al., 2012).

Other findings of serious concern reported for children born to teenage mothers include higher rates of neglect and accidental injury alongside more frequent use of emergency or acute services (Berrington et al., 2005; Moffit et al., 2002; Pittard et al., 2008; Rafferty et al., 2011), although there is some evidence these improve with increased professional support (Koniak Griffin et al., 2003). Young parents are also significantly overrepresented among mothers who have children removed from their care (Broadhurst et al., 2014). It is of note that, for figures from 2009-2011, nearly 60% of children involved in serious case reviews (SCRs) in the UK involved mothers under 21 years of age, whilst the average age of first-time mothers at delivery in 2010 was 27.8 years (Brandon et al., 2011, 2012), with 2005-2009 data also reporting a disproportionate representation of teenage mothers (Brandon et al., 2010).³

Research has further described negative cognitive and behavioural sequalae for the children of young mothers. Several studies have reported that cognitive delay, language delay

³ Statistics for more recent serious case data does not report the breakdown of cases by mother's age, although the 2011-2014 report did highlight teenage parenthood as a relevant vulnerability factor (Sidebotham et al., 2016).

and lower academic achievement are more prevalent among children of teenage mothers (Baudry et al., 2017; Duncan et al., 2018; Keown et al., 2001; Miller et al., 1996; Morinis et al., 2013; Ryan-Krause et al., 2009), although other studies have failed to find these associations (Thomson et al., 1995). Greater levels of problematic or maladaptive behaviours have also been reported among the children of teenage mothers. Agnafors et al. (2019) found higher rates of externalising and internalising behaviours in children of teenage mothers at three years of age compared to the offspring of older single mothers, while Moffit et al. (2002) found that the five-year-old offspring of young mothers were reported as showing higher emotional and behavioural problems by multiple informants. Considering older children, Cederbaum et al. (2020) undertook a systematic review of studies exploring the sexual and substance use behaviours in the offspring of teenage mothers. The authors found inconsistent evidence for associations with substance use but did conclude that children born to teenage mothers were more likely to engage in risky sexual behaviours, with an increased likelihood, for daughters, of becoming pregnant as a teenager themselves. The latter finding has been frequently cited in the literature, with concern that the relative disadvantages are perpetuated intergenerationally (Cook & Cameron, 2015; DfES, 2006; Hardy et al., 1998).

Other findings have indicated lasting impact on children of teenage mothers into adulthood. Using a UK cohort sample of young adults born between 1970 and 1983 and interviewed between 1991-1999 when they were aged 16 years or older, Francesconi et al. (2008) reported lower academic attainment, reduced earnings, higher rates of economic inactivity (not working or in education) and teenage maternity in the children of teenage mothers, but no difference in symptoms of emotional distress. In a twenty-year longitudinal study of adults born between 1972-73 in a city in New Zealand, Jaffee et al. (2001) also reported impacts on the adult offspring of young mothers with an earlier average school leaving age and greater rates of unemployment, early parenthood, and violent offending. Khatun et al.

(2017) examined the IQ of the 21-year-old offspring of teenage mothers using a cohort study in Australia, finding an average IQ that was three IQ points lower for children born to teenage mother than for those born to older mothers. However, while remaining statistically significant when adjusting for SES, maternal IQ, smoking and alcohol use in pregnancy, birthweight, breastfeeding and parenting style, the difference reduced by more than half. Furthermore, this IQ difference is slight and remains within the normal range. Consequently, it is difficult to assess the impact in real terms, if any, of the 'neurodevelopmental disadvantage' the authors conclude is experienced by children of teenage mothers.

In addition, many authors have contended that the negative outcomes ascribed to teenage motherhood are not so straightforward and must be understood within their systemic context (e.g. Duncan, 2007; Smithbattle, 2000). Data in the UK indicates that one in three teenagers from disadvantaged socioeconomic backgrounds become young parents and the most deprived areas continue to have the highest rates of teenage pregnancy (Action for Children, 2017; DfES, 2006; Mental Health Foundation, 2013; ONS, 2014; PHE, 2018. 2019). Additionally, when teenagers from more advantaged socioeconomic backgrounds do conceive, they are more likely to opt for termination than their disadvantaged peers (Schreiber, 2001; Väisänen & Murphy, 2014). Other indicators of relative disadvantage, such as persistent school absence prior to 14 years of age, dislike of school, and lower than expected educational attainment, are also associated with increased risk of becoming pregnant as a teenager, even once effects of socioeconomic deprivation are taken into account (Action for Children, 2017; DfES, 2006; Guillari, & Shaw, 2005; Harden et al., 2009; Maxwell & Chase, 2008; PHE, 2018, 2019; SEU, 1999; Trivedi et al., 2007; Wade, 2008). Teenagers who have spent time in care are also much more likely to become young mothers, as are teenagers who report unhappy childhoods more broadly (DfES, 2006; Harden et al., 2009; Maxwell & Chase, 2008; SEU, 1999; Trivedi et al., 2007; Wade, 2008). Childhood sexual abuse (CSA) has also been associated with adolescent pregnancy in several studies, as has neglect, with studies reporting that teenage pregnancy was twice as common among women who had experienced CSA and that one in five young mothers report a history of CSA (Harner, 2005; McNiss et al., 2021; Roberts et al., 2004; Noll & Shenk, 2013; see Francisco et al., 2008, for systematic review). Data suggests risk factors have a cumulative impact on likelihood of teenage parity, with those who are most disadvantaged most at risk (Berrington et al., 2005; DfES, 2006).

Notably, prior risk factors not only increase the likelihood of becoming a young mother, but also appear to have a moderating influence on the extent of the reported negative outcomes for their children. A recent longitudinal study found that a history of childhood sexual abuse in teenage mothers was associated with insecure attachment in infancy and externalising behaviour in both preschool and early adolescence in their offspring compared to the children of their non-abused teenage counterparts (Pasalich et al., 2016). Similarly, Yoon et al. (2018), again using a longitudinal dataset, reported that childhood adversity in the form of family dysfunction or abuse was associated with increased parenting stress when their child was three years of age and with use of physical discipline at six. These factors, in turn, were positively associated with rule-breaking and aggressive behaviour in their offspring at age of eleven years.

In fact, there is considerable evidence suggesting that the outcomes associated with young motherhood are not significantly out of line with those predicted from these prior risk factors. Consequently, positioning young motherhood as a causal factor may place undue weight on this factor in determining life outcomes. López Turley (2003) compared the behavioural and social outcomes of young mothers and their offspring with those of their siblings who became parents as older women in a US cohort study, finding that the mothers and their offspring were similarly disadvantaged, suggesting a greater influence of maternal background than maternal age. Similarly, in a systematic review of studies using UK datasets to quantify long-term outcomes of teenage motherhood, Squires et al. (2012) concluded that

the evidence of negative impact on either the mother or child was limited and that which is available indicates that disadvantaged family background rather than teenage maternity is the main driver of the long-term socioeconomic deprivation experienced by many young mothers. In another systematic review of UK studies, Pilgrim et al. (2010) specifically considered studies which not only attempted to control for pre-existing differences in risk factors but also for unobserved differences that may influence selection into teenage or older motherhood by including teenagers who miscarried and twin studies. Again, the authors concluded that any direct impact of teenage motherhood was slight when found, and that it was other risk factors of which teenage parenthood is a symptom, rather than teenage motherhood itself, that led to long-term negative socioeconomic effects.

Furthermore, in the previously cited UK study by Francesconi et al. (2008), the impact on educational attainment did not remain significant when controlling for family background and unobservable factors. However, despite finding no main effect of being born to a teenage mother on emotional distress in offspring, teenage motherhood in combination with poverty did increase the risk of emotional distress in early adulthood. This may be understood as an accentuation of the known impact of poverty alone. For the majority of factors, however, family structure (separated or nonseparated parents) was more influential in interaction with teenage motherhood than poverty, including for educational attainment. The greater influence of family structure could arise from the fact that having two parents may mitigate some of the stress associated with poverty and provide greater social, if not financial, support.

It is also apparent when it comes to effects on mental health that the assumption that early parenthood is causative is not the whole story. Mollborn & Morningstar (2009), analysing data from two longitudinal US datasets, replicated the finding that teenage mothers had higher levels of distress than either their childless peers or older mothers, however they also found that their distress levels were already higher prior to becoming pregnant and then remained

higher after birth and into early and middle adulthood. This latter finding therefore indicates that higher levels of mental health difficulties may predate pregnancy and may, in fact, be implicated in a greater likelihood of becoming a teenage parent, with research indicating similar associations in UK longitudinal cohorts (Kiernan, 1997; Nettle et al., 2013). Analysis of the 1958 UK birth cohort again indicated the cumulative impact of prior risk factors, finding that women who had emotional difficulties at both seven and sixteen years of age, combined with low educational achievement at the age of sixteen and having a mother who had been a teenage parent herself, were eighteen times more likely become a teenage mother (Keirnan, 1997).

It is plausible that the mechanistic nature through which adverse childhood experience and deprivation exerts its effects may, at least partially, be through impacts on maternal mental health: childhood adverse experiences and poverty have long been associated with effects on mental health, with good social support, especially from family, partners and friends, identified as having potential protective benefits (Bell, 1990; Felitti et al., 1998; Gariépy et al., 2016; Kessler et al., 2005; Nelson et al., 2020). Indeed, there is evidence in support of this hypothesis: Berrington et al. (2005), analysing data from two longitudinal UK cohorts, found that the greater number of accidents and increased rate of behavioural problems among the offspring of teenage mothers was mediated by maternal mental health, which itself was associated with being a lone parent and living in poor quality housing. Therefore, it was not having a teenage parent but having a mother who was depressed or anxious that resulted in the increased rate of these negative outcomes. Such outcomes, then, were higher among offspring of teenage mothers because teenage mothers were more likely to have mental health difficulties, with those with more limited parental support and housing deprivation most affected. This is in line with wider research which has consistently linked poor or insecure housing with reduced

maternal mental health, as well as with physical health complaints for the child (Pevalin et al., 2017; Shelter, 2006; Suglia et al., 2011).

Furthermore, mental health difficulties have been strongly associated with parenting capacity, as well as with adverse impacts on cognitive and emotional development for children (Grace et al., 2003; Martins & Gaffan, 2000; Murray & Cooper, 1997), with evidence that efficient detection and targeted intervention may mitigate these risks (Howard & Challacombe, 2018). Lanzi et al. (2009) found that teenage mothers reported greater prenatal and postnatal depressive symptoms than older parents, with development of depression also more likely between pre- to postnatal measurements for young mothers. In turn, higher depression scores were associated with reduced maternal warmth and responsivity, reduced maternal verbal input and fewer attempts at eliciting warmth and comfort from the mother by the infant. Consequently, mental health appears to be an important area for intervention and support for teenage parents, potentially representing a mediating factor through which risk factors may translate into poorer outcomes.

Considering these findings, the disproportionate representation of young mothers in SCRs may be less surprising given that, for all data reported in the last 10 years, the most common risk factor involved in cases was maternal mental health problems followed by domestic violence, with parent's own adverse childhood experiences also frequently cited (Brandon et al., 2010, 2011, 2012, 2020; Office for Standards in Education, Children's Services and Skills [OFSTED], 2011; Sidebotham et al., 2016). Likewise, rates of mental health difficulties are markedly raised among women undergoing care proceedings both prior to and during pregnancy regardless of age Griffiths et al., 2020). In their qualitative analysis of the 2009-2011 SCR reports, Brandon et al. (2012) described a juxtaposition between the frequency of cases for which young parenthood is a theme and the scarcity of recommendations referencing it. They argue this is likely to be because the evidence indicates that young

parenthood may not be a highly informative factor in isolation; however, when present in combination with adverse circumstances for which young mothers may be more at risk, services may need to give greater consideration to the mother's age. This is in line with analysis of the SCR review data which points to the cumulative impact of risk factors: Brandon et al. (2012) specifically highlight the interaction of domestic violence, mental health needs and substance misuse, while the report accompanying the 2014-2017 data emphasises the particularly high risk when poverty and complex and cumulative influences on neglect converge for children with reduced visibility to services (Brandon et al., 2020). This latter report further highlighted cases where the complex needs and vulnerabilities of the parent meant that the voice and needs of the child were overlooked, as well as how parents' distrust of services, often with roots in their own childhood experiences, can frustrate efforts even when they are a concerned and non-abusive party. This observation, however, was not made with any specific reference to young parents and data concerning their representation among these cases was not discussed.

Finally, it is important to emphasise that the poor outcomes associated with young motherhood are not universal. Oxford et al. (2005) found that 43% of a group of young mothers fit a "normative" rather than "delinquent" stereotype – they were financially independent, did not engage in risky behaviours and had normative physical and mental health outcomes. A recent systematic review identified female empowerment and opportunity as influential in reducing teenage pregnancy rates, suggesting that motherhood may offer forms of empowerment to young women with few other sources of opportunity (Nkhoma et al., 2020). While the authors of this latter study suggested relevant application for low and middle-income countries, this can also be understood within the relative inequality of the UK, where rates of teenage motherhood are markedly higher in more deprived areas and for young women who are already lacking educational and economic opportunities. Diaz and Fiel (2016), studying a

US cohort, argued negative outcomes are most pronounced for those who are least likely to become teenage parents and who have most to lose in terms of opportunity costs, social support and stigma. For those with higher prior risk, they suggest, early motherhood has negligible impact on their projected trajectory and may even have a positive impact on likelihood of completing college and early adulthood earnings. The latter idea is echoed in several qualitative studies with young parents, which document how young motherhood can bring about impetus for change, especially for teenagers who had been on a delinquent trajectory, providing motivation for returning to education and gaining employment (Bell et al., 2004; Hanna, 2001; McDermott et al., 2004; McDermott & Graham, 2005).

Stigmatisation of young mothers

Given the mismatch between public perception and policy and the statistics and equivocal findings regarding the impacts of early maternity, several authors have argued that the political and social narrative surrounding young motherhood is both carefully constructed and self-perpetuating. Others have contended that it reflects a concern with the 'wrong type' of women becoming mothers or attempts by agents of power to maintain control of the reproductive sphere.

Duncan (2007) describes teenage parenthood as a 'moral panic', a term coined by Stanley Cohen in 1972 to describe the phenomenon by which social and political reaction to members of society seen to exist outside of normative values or culture, aided by mass media, accentuates and increases the extent to which they are conceptualised as a threat to societal values (Cohen, 1972). Duncan postulates that the understanding of why teenagers have children feeds into a social threat narrative, signifying the breakdown of the family and the lack of aspirations or expectations of better futures as causing rising teenage pregnancy rates. Despite this public perception being at odds with the reality of falling rates of teenage

conception, this moral panic creates a need for policy to be seen to be addressing the issue, thereby reinforcing its message.

Indeed, considerable stigma, judgement and even ridicule remains directed towards teenage mothers, with young motherhood being associated with welfare dependence, promiscuity and irresponsibility (Ellis-Sloan, 2014). This is perpetuated by media reporting of atypical and sensationalised cases of young mothers which appear to confirm these associations (e.g. the case of Chantelle Steadman; Bracchi, 2009) and by popular media representation of a stereotype of young mothers as 'Vicky Pollard' figures (Little Britain, BBC 2003-2006), alongside the previously described political rhetoric, including the restriction of welfare benefits available under the justification of deterring young women from becoming pregnant by removing this 'incentive' (The 40 Group Report⁴, cited by Grice, 2013). The latter conjecture is at direct odds with the UK government's own evidence that most young parents live either with their parents or in insecure housing and that "there is no evidence that young women become pregnant to access social housing" (PHE, 2019), despite politicians playing into this discourse for decades⁵. In addition, young mothers are not eligible to access welfare benefits in their own right prior to their own 16th birthday, leaving them reliant on their families, older partners or children's social services should they become parents before this age. Once sixteen, young parents then continue to be entitled to less welfare support than older parents for a further eight years (Gardiner & Rahman, 2019).

Bonell (2004) suggests that the current concern with teenage parenthood represents a refocus from the stigmatisation of unmarried mothers now that this has become more

⁴ A proposal for reducing welfare spending produced by a group of Conservative MPs

⁵ Exemplified in former MP Peter Lilley's description of teenage mothers getting "pregnant just to jump the housing queue" in a list of alleged "benefit offenders" during his speech to the 1992 Conservative Party Conference, insensitively performed as a Gilbert and Sullivan parody.

normative as the economic and social disparity between genders has shifted and religious influence decreased. Consequently, the preoccupation with teenage mothers is suggested to embody a continuing attempt to politicise and control the reproductive choices of young women and, especially, of young women with the most limited social and economic sources of power. Furstenberg (2003), a long-time researcher studying trends in teenage parenthood in the USA, describes how gender relations and associated shifts in the economic and social benefit of marriage, especially for women from poorer socioeconomic backgrounds, has resulted in the reduction of young women marrying simply because they had become pregnant. Describing a similar discourse regarding this issue in the USA as seen in the UK, Furstenberg (2003) summarises that the concern with teenage motherhood has:

'more to do with how our political culture has responded to the ancillary of poverty, sexuality, gender relations, and the like, than with the teenagers having babies before they want to or their families want or what society thinks is good for their welfare and that of their offspring' (p. 25).

It is perhaps of note, here, that it was not long ago that unmarried mothers, and most acutely young unmarried mothers, were subject to such intense societal stigma accompanied by a lack of economic opportunity that they were frequently either forced or given no viable option other than to give up their babies for adoption if they did not marry. During pregnancy many were sent away from home to avoid familial shame, often to institutions where they were subjected to harsh and degrading treatment justified as punishment for their moral failings (Hinsliff, 2021; Kennedy, 2021; Sherwood, 2016). Estimates suggest that 250,000 women were coerced into giving up their children in the UK (Kennedy, 2021). It wasonly in 2016 that the Catholic church in England and Wales apologised for its role in these practises in the 1950s to 1970s (Sherwood, 2016), and calls for a government apology in the UK are ongoing, lagging behind nations such as Ireland and Australia, with renewed coverage of the

lifelong impact of these events only this year (Hinsliff, 2021; Kennedy, 2021). It is possible that f public perception of increasing rates of teenage motherhood is partially due to the increasing visibility of teenage mothers in a society where they have greater economic and social opportunity than before.

Nevertheless, the social and political narrative remains stigmatising, with young motherhood increasingly positioned as a social and health issue now that the influence of religion and societal investment in the immorality of premarital sexual relationships has waned. Kamp & McSharry (2018) argue that this shift has simply resulted in a move from moral condemnation regarding premarital sexuality toward a conception of the teenage parent as economically irrational and irresponsible and as a public health and welfare concern – as a 'social threat and economic burden'. Breheny & Stephens (2009) analysed the discourse about teenage motherhood in medical and nursing journals, describing multiple ways in which young mothers are constructed as 'unsuitable mothers': i) a 'public health' discourse presents young motherhood as a public health problem requiring monitoring and response; ii) an 'economic discourse' presents young mothers as a financial drain on society and economically reckless in regard to themselves; and iii) an 'ethinicity discourse' suggests early reproduction is a minority group issue. Finally, these all combine forming a 'eugenics discourse' whereby teenage mothers are judged unsuitable. Breheny and Stephens conclude that 'concern about teenage motherhood is as much about the wrong sort of young women becoming mothers, as mothering too soon.'

Kelly (1996) similarly identified different strands of discourse in her analysis of media articles in Canada from 1982-1992, describing a competition for dominance between: stigmatisation of the mother as deviant; stigmatisation of the family background and welfare context as deviant; a leftist feminist discourse arguing that the mothers are stigmatised through gender and class inequality and the primacy of economic success; and the voices of

the young women themselves who reject their stigmatisation. Although this latter study concerns media articles from 30 to 40 years ago outside of the UK, this represents the time at which the shift from the religious moralising narrative was increasing. Similar narratives appear to have been constructed in slightly different guises across time and across nations. Kidger (2004), in critique of New Labour's strategy for young parents, asserts that the way these narratives are set up means young mothers are left with an irreconcilable dilemma whereby they can go out to work and be judged for not being a 'good mother' and taking personal responsibility for childcare or stay home with their child and be judged for being reliant on welfare assistance. Other authors have highlighted the juxtaposition of being portrayed as both delinquent and a societal burden, whilst also being seen as passive and vulnerable and in need of support (McDermott & Graham, 2005; Whitehead, 2001).

Evidence shows that young mothers are highly cognisant of their stigmatisation and many teenage mothers reporting experiences of prejudice. Describing findings from focus groups undertaken to identify the support needs of young parents, a report by Action for Children (2017) noted that some of the young parents involved 'felt that people assumed 'young parent' was synonymous with 'bad parent''. Likewise, in a systematic review of qualitative research exploring the experiences of young motherhood in the UK, McDermott et al. (2004) found that stigma was a theme in nine of the ten identified articles, with the one study in which this was not reported having a particularly narrow focus of interest on nutrition. Negative judgement was perceived as coming from society generally as well as more directly through familial reactions, attitudes experienced at school which factored into some mothers' decisions to leave, and, often especially, from health professionals. To some degree this stigma was also internalised, affecting young mothers' confidence and creating pressure to keep up appearances or be the 'perfect' mother (McDermott et al., 2004; Schreiber, 2001).

At the same time, young mothers' resist and reject the stereotyped identity, both personally, in terms of gaining purpose and self-esteem through their maternal identity, as well as in the way they position themselves interpersonally. While this rejection is often explicit, research also describes the more subtle and implicit processes by which this takes place. Ellis-Sloan (2014) observed that awareness of this stigmatised identity affected the ways in which teenage mothers presented themselves and their pathways into young parenthood in an attempt to defend against expected judgement, for example emphasising that the pregnancy had been unplanned but also that they wanted the child upon discovering they were expecting. Other authors have discussed how young mothers may engage in 'othering', a process by which they seek to distance themselves from the stereotypical teenage mother to assert their own 'good mother' status, thereby simultaneously rejecting and acknowledging – and perhaps even perpetuating – societal prejudice (Ellis-Sloan, 2014; Ellis-Sloan & Tamplin, 2018; McDermott et al., 2004; McDermott & Graham, 2005; Jones et al., 2019; Norman et al., 2016; Schreiber, 2001; Yardley, 2008).

The extent to which mothers feel stigmatised versus able to enact a more positive parental identity may also depend on the cultural contexts to which a mother belongs.

Macleod and Weaver (2003) argued that teenage parenthood may be an acceptable norm within certain subgroups or areas, where the social impact could be expected to be reduced (also Yardley, 2008). Wiemann (2005) found that teenage mothers in the United States were more likely to feel stigmatised if they had aspirations to complete college, suggesting that those who were attempting to live within a particular set of social norms felt most affected by being perceived as stereotypically outside them. Similarly, Whitley & Kirmayer (2008) found that Euro-Canadian women in their early twenties reported stigmatisation which they attributed to their age, while older Euro-Canadian and Afro-Canadian mothers of any age did not. Whitley & Kirmayer hypothesised that this divergence in perceived stigmatisation was

associated with the marked increase in average maternal age among Euro-Canadian women whilst in the Caribbean subculture earlier childbearing remained common. Similarly, subcultural factors may also have some influence on the observations of differences in the extent of the impact of early maternity on expected outcomes according to socioeconomic background. In a qualitative study of mothers who became pregnant prior to the age of sixteen, Aarvold and Buswell (1999) described how class and gender interact in defining female maturity, with working-class women achieving this through their maternal identity and responsibility, whilst autonomy and self-development prior to childbearing serve as markers of adult identity for women from middle-class backgrounds.

It is also of note that the views and reactions of one's social group may be inextricably involved in the outcomes experienced by the mothers and their children. Stigma is likely to be a further source of stress, with impacts on self-esteem and social support which may have direct implications for emotional and psychological wellbeing (Whitehead, 2001). Lawlor and Shaw (2002) describe how, within an ultra-orthodox Jewish community in Jerusalem where marriage and early childbearing was highly valued, research indicated good outcomes for teenage mothers. Greater support, both socially and practically, is likely to be available in a community that encourages rather than stigmatises young motherhood. Likewise, outcomes are also likely to be influenced by the practical and financial support available to the mother, which may vary considerably across regions, countries, and time according to local and national policy and infrastructure.

Engagement with Healthcare and Other Public Services

Difficulty engaging young parents in services is often cited as a critical barrier to addressing the negative outcomes associated with teenage motherhood. OFSTED's (2011) review of lessons learned from SCRs between 2007-2011 suggested that specialist services

may be needed to sufficiently engage and meet the needs of young parents. Evidence also indicates that teenage mothers are more likely to access antenatal care later in pregnancy, and that improving antenatal care can reduce poorer outcomes at birth (Santos et al., 2013; Vieira et al., 2012). To this end, specific guidance has been produced for midwives working with pregnant teenagers with the aim of making teenage parents feel welcome in services and, consequently, enhancing engagement (DfCSF, 2009). The complex interactions of risks, disadvantage, vulnerability and negative outcomes associated with teenage motherhood previously discussed suggest that service input may be especially needed by young mothers and their children. Consequently, addressing the issue of engagement with services is important, both for the wellbeing of the young mothers themselves as well as for their children.

A fear of judgement owing to the stigmatisation of young motherhood may be an important factor leading to difficulties in engaging young mothers in services. Many of the accounts exploring this issue may be described as 'grey literature', which refers to any publications that have not undergone peer-review, such as government reports and policies, charity or third-sector publications, and is so-called due to the greater uncertainty about the quality or standard of the evidence presented. This contrasts somewhat with the wider more heavily peer-reviewed evidence-base concerning quantified outcomes. However, for marginalised groups with limited social capital and power, looking to this literature may be particularly important.

Several reports from charities working with young mothers have described their mistrust of services, often fearing that if they seek help – including for mental health difficulties, domestic violence or family breakdown – they will be judged, treated less favourably, not taken seriously, or have their children taken into care (Action for Children, 2017; Home-Start UK, 2019; Mental Health Foundation, 2013; PHE, 2015). Moreover, these fears were felt to be, at least partially, confirmed during interactions with professionals, with teenage mothers feeling their concerns were dismissed because of their age (Action for Children, 2017; Home-Start

UK, 2019; Mental Health Foundation, 2013). One report produced by Home-Start UK (2019) clearly highlighted the impact of this perceived prejudice: "Young mums told us they felt judged, and this stopped them engaging with services" (p. 47). Furthermore, there is some evidence that the young mothers who had the lowest self-confidence in their parenting abilities, and may be most in need of support, were the most reluctant to access professional mental health support as well as to engage with peer support (Mental Health Foundation, 2013).

These accounts are supported by the peer-reviewed evidence base, in which health and social care professionals are described as being a group from which teenage mothers perceived a high level of judgement. This may be because of the power that their judgements may be feared to have when making decisions about the capabilities of young mothers. The young teenage parents (under 16 years) interviewed by Aarvold & Buswell (1999) described a 'seemingly disproportionate surveillance', while similar experiences were reported across the age range of young mothers who felt that health professionals judged them, treated them differently because of their age and that their views were not taken seriously or given due weight (Harrison et al., 2017; Higginbottom et al., 2006; Lea, 2006; McDermott et al., 2004; Redwood et al., 2012; Ross et al., 2012; Yardley, 2008). Norman et al. (2016) described how young mothers consequently felt that they had to prove themselves as a young parent against the expectations of the professional. Norman et al. suggest this often took the form of asserting their own expertise in knowing their own child, which was set in opposition to the expertise of the professional. Perceived differences in social class were highlighted as playing a role in this process. Bad experiences and perceptions that staff held negative views about young parents were reported as one reason that young mothers gave for reluctance to access services, including antenatal classes (Ross et al., 2012; Norman et al., 2016).

Reluctance and fear about accessing services may be especially present for mental health concerns. Research has indicated that young parents may hide symptoms of depression, fearing

judgement of being unable to cope and even that they may have children taken away (Birkeland et al., 2005; Hardie Boath et al., 2013), while others may not recognise their experiences as symptoms of PND (Hardie Boath et al., 2013; Logsdon et al., 2009). Furthermore, this does not appear to be assuaged upon receiving a diagnosis, with the young mothers feeling that the diagnosis itself led to professionals seeing them more negatively and reduced their confidence further (Hardie Boath et al., 2013). It is possible that this is an accentuation of the difficulties that many older mothers feel in reconciling their symptoms of PND with the idealised mother stereotype valued by society (Button et al., 2017; McLoughlin, 2013), especially in a group of young women who already feel they must work harder to prove their worth as mothers. However, this is clearly problematic given the higher rates of mental health problems for young mothers and the indication that this may be a mediating factor in the negative outcomes reported, alongside evidence that early intervention is best and outcomes for parents and children worsen when symptoms are prolonged (Campbell et al., 1995; Howard & Challacombe, 2018; Reid & Meadows-Oliver, 2007).

Nevertheless, young parents do also describe positive interactions with providers, although negative experiences may be more memorable (Harrison et al., 2017; Lea, 2006; Mental Health Foundation, 2013; Norman et al., 2016; Ross, 2012; Thompson & Bruns, 2013). Research suggests young parents value patient interactions where they are listened to, within a positive, supportive and open approach, which increases their confidence (Harrison et al., 2017; Normal et al., 2006; Wahn et al., 2005; Higginbottom et al., 2006). In contrast, taking over and doing a task for the mother rather than supporting her to do it herself has been associated with decreased confidence and increased feelings of helplessness (Hunter, et al., 2015). Many of the policies and reports highlight the importance of a key named professional who is able to build trusting and long-term relationships with vulnerable mothers (e.g. DfCSF, 2008, 2010; PHE, 2019). This may help to allay fears of judgement, with young mothers attesting that it is easier

to talk to professionals when they have known them for a while (Cronin, 2003; Hardie Boath et al., 2013). Evidence suggests important impacts of such relationship building, with a randomised controlled trial evaluating the Family Nurse Partnership programme reporting improvements in child development, educational attainment, and parenting confidence, although no impacts on health behaviours or need for safeguarding were found (Robling et al., 2016, 2021).

Prejudice among Professionals?

The conclusions and recommendations cited in the literature appear based on the assumption that reassuring young parents that they will not be judged, such as through greater specialist intervention or targeting of services, will overcome the reported difficulties in engagement. This assumption somewhat presumes that it is the expectations and interpretations of the mothers that need altering. This is encapsulated by the conjecture in the practical guidance for antenatal services that 'even being glanced at by other service users may be interpreted as disapproval' (DfCSF, 2008, p. 12), as well as in Ross et al.'s (2012) conclusion that young mothers were especially sensitive to how their were treated because of their strong awareness of societal views. While young mothers may be highly conscious of their stigmatised identity, given the considerable societal stigma and the evidence of mistrust of services by young mothers and their reports of perceived judgement making them reluctant to access services, alongside the vulnerabilities and factors that may mean young mothers need the support of services, it appears prudent to consider what evidence there is that professionals are not judgemental.

Within the grey literature reviewed, there was little evidence that much consideration was given to the attitudes or beliefs of professionals, with the exception of a quote in

guidance for maternity services from a midwife specialising in teenage pregnancy advising professionals to reflect on their own biases and put these aside (DfCSF, 2008, p. 13). Looking to the peer-reviewed literature base, only six articles considering the perceptions and attitudes or experiences of health and social care professionals towards teenage mothers were identified. One was narrowly focused on health visitors' experiences of encouraging and supporting breastfeeding, finding that health visitors perceived the wider support systems, exposure to breastfeeding and self-confidence of the mother to have more influence than socioeconomic background or maturity, but with limited generalisability beyond this specific application (Bettison, 2014). A second interviewed Public Health Nurses in the US about the needs of teenage mothers and the challenges in supporting them (Atkinson & Peden-McAlpine, 2014). They identified an overall problem encapsulated as "incomplete and at-risk adolescent maternal development", with three categories of problems that needed to be negotiated: i) challenging life circumstances and risky behaviours; ii) limited knowledge of pregnancy, parenting or child development; and iii) limited knowledge of how to access and use resources to support their own parenting. Professional input was conceptualised as crucial in moving the mothers, in the words of one nurse, from "immature" to "responsible". However, the study did not directly explore the attitudes that might underly the professionals' understandings of the needs and challenges faced when working with young mothers. Another qualitative study reported how health visitors' viewed specialist support groups as important for helping young parents, both for social support and for developing knowledge and skills, with openness felt to be a key approach for engaging young mothers (Niven & Dow, 2016). However, again the focus was on the health visitors' views regarding the utility of targeted support groups rather than about the young mothers themselves.

Taylor et al. (2009) did consider more directly and experimentally how the mother's age may influence the judgements made by health visitors about parenting adequacy. This

study of 200 health visitors in Scotland employed a factorial survey design, in which several factors were varied within a short vignette describing an interaction between a mother and young child. For mother's age, three ages were used: 15, 25 and 40 years. Other factors manipulated included the child's gender, type of housing, medical history, and child and parent behaviours. These factors were randomised into vignettes, with each health visitor viewing a subset of ten of the possible combinations and providing a single rating of parenting quality, on a scale from one to ten, for each vignette. From this, it was possible to model the contribution of each of these factors to the ratings of parenting adequacy. Age was not found to be a significant factor in the ratings given by the health visitors, with only the parenting behaviour itself and type of accommodation having significant influence. However, the nature of attributions surrounding age was not assessed in detail, with this simply one of many factors of interest. Furthermore, having seen several varied factors, participants were likely to be aware which factors were of interest in the study, with mother's age being one factor for which participants may be particularly cautious about indicating as influencing their judgements.

Higginbottom et al. (2006) explored professionals' views and experiences of working with young parents from ethnic minority groups, interviewing 41 service providers as well as young parents themselves. Higginbottom et al. highlighted how professionals' views differed from government policy with professionals' reporting that most young mothers are positive and good parents, with only a minority needing extra support, and describing how it could be a turning-point from a troubled trajectory. Stigma was considered in terms of the intersectionality of ethnicity and young parenthood, as were norms and views within individuals' subcultures; consequently, these findings may not necessarily generalisable beyond these groups.

The most in-depth exploration of the attitudes and behaviours of professionals when working with young mothers considered the experiences of a small group of young mothers

with children with disabilities in the USA. To get a rich understanding of their experiences, Lea (2006) interviewed the mothers several times over a nine-month period as well as talking with the professionals supporting them and analysing some of the meetings and interactions between the mothers and services. Lea described how the mothers felt ignored or belittled, with the interactions suggesting that decisions were often made amongst professionals with only cursory or token interest paid to the views of the mother. Mothers further reported that they felt the professionals were less concerned about behaviours such as being late for them, feeling that this indicated a lack of respect and value, with one mother noting that the professionals' behaviour changed if her own mother was present for appointments. Furthermore, interviews with service providers found that professionals did refer to age as a cause of difficulties or for being unable to engage the mothers, which Lea hypothesised may be partly driven by a fear of not being able to meet the multiple needs and vulnerabilities of both child and mother and/or defensive reactivity to being unable to successfully engage the mothers. However, mothers did also show a general distrust of services and fear that they were monitoring in order to criticise, which made the mothers guarded during interactions. Nevertheless, when professionals demonstrated over time that they would follow through with what they said, trusting relationships were possible.

Consequently, research concerning the attitudes of professionals towards teen mothers is scarce and tends towards being either narrow and therefore limiting generalisation beyond the topic of focus, or so broad that age was only one of many factors considered, thus limiting the depth of study. Furthermore, it was not possible to find any such research that considered situations where there may be mental health difficulties, which is surprising given the large evidence base indicating that young mothers are at increased risk of mental health difficulties, combined with evidence that mental health be a factor with bearing on other negative outcomes associated with teenage maternity.

Research Aims and Rationale

Following the review of the literature presented in this chapter, there is a clear paucity of research exploring how maternal age may influence the way that health and social care professionals understand the factors influencing difficulties for mother-child dyads and the decisions they subsequently make about the needs and risks present. Understanding how age and related factors, such as the vulnerabilities or risk factors that may more frequently affect young motherhood, may influence professionals' understandings and decisions has clear applications for improving the support and outcomes for young mothers and their children, not least in relation to the disproportionate representation of young mothers in SCRs.

There are multiple ways that the views and biases of professionals may impact on the care received by young mothers and their children. Firstly, young mothers' mistrust of or reluctance to engage with services may mean that important information that would trigger safeguarding is not readily available to services or that interventions which may alleviate difficulties at an early stage are not implemented, with problems thereby being picked up at a later and more entrenched stage. It is important therefore to consider whether there is evidence for the prejudice that young mothers fear will stand against them if they seek support from services. Secondly, professionals may show a bias towards the young mother's needs, viewing her as more vulnerable, and therefore be more likely to be distracted by the mother's own needs at the expense of the needs of the child. This may also result in failure to initiate safeguarding or early interventions to meet the child's needs at an appropriate time. Finally, professionals may have lower expectations of the mother's parenting ability and thus see initial causes for concern or difficulties as inevitable outcomes of young parenting rather than indicators requiring action. Again, this may mean that early interventions are not utilised appropriately. With this latter possibility, professionals may also appear dismissive of issues raised by

mothers which may add to feelings of being judged, especially where this concerns the mother's own wellbeing. These possibilities are not mutually exclusive and may interact.

Attribution Theory and Bias

To explore this further, it is necessary to consider in detail the aspects of a situation that humans typically consider when making sense of the behaviours and presentations of others. Attribution theory (Weiner, 1972) proposes that individuals attempt to understand the actions of others by attributing causes or motivations to others' behaviour along three dimensions: locus of control, stability, and controllability. Locus of control concerns the extent to which the cause is seen as internal versus external (i.e. within versus outside the person). Stability refers to whether the cause is fixed or changeable over time. Finally, controllability concerns the extent to which the person has control over the causes (e.g. skill or efficacy as higher in control than luck or aptitude). Ewart and Pennington (1987) argued that these dimensions together describe personal responsibility; with more internal, stable and controllable attributions indicative of high personal responsibility. The attributions that people make about people's behaviour can then affect their own reactions to it. Within research into offending behaviour, reduced attributions of personal responsibility were associated with less restrictive or punitive sentencing decisions (Ewart & Pennington, 1987). Applied to young motherhood such attributions may influence the interventions and actions taken by professionals with whom young mothers come into contact.

Attribution theory has been applied across many social, educational and health contexts, with vignettes commonly used to study the way different factors influence the attributions made and subsequent decision making. These attempt to give a thick description of a situation which is similar to those encountered in real life experience, with one or more factors of interest

manipulated to study the effect. For example, Kyne and Williams (2007) altered the gender of the perpetrator of a crime presented in a vignette given to drug and alcohol counsellors, finding reduced attribution of personal responsibility to female perpetrators, particularly when counsellors were also female. This study used a single vignette asking the participants to engage in depth with the vignette by responding to both open questions about causes of behaviour and recommendations for next steps, as well as closed response scaled items assessing the three attributional dimensions previously described using an adapted version of the Causal Attributions Scale (Russell, 1982). It was not possible to find any previous application of this method for understanding how characteristics of the mother may impact how professionals make attributions about the factors involved in scenarios involving mothers and their children, nor about the judgements or decisions they make based on this understanding.

Research Questions

This study aimed to investigate whether health and social care professionals show attributional or decision-making biases towards young mothers. A vignette methodology was employed in which professionals were presented with a short vignette which described an ambiguous scenario in which symptoms of depression in the mother and/or developmental difficulties in the child may be present. The age and the socioeconomic status (SES) of the mother presented were varied to assess whether these factors influence the attributions and judgements made either alone or in combination. SES was included due to the high association of disadvantaged SES with teenage parenthood, as well as the association more generally of social disadvantage as a significant stressor with links to poorer mental health.

As one of the most robust findings for increased risk among teenage mothers, and with clear implications for impact on the wellbeing of both mother and child as well as for intervention, mental health would appear to be an area for which service input may be both

highly needed and beneficial. Consequently, symptoms indicating possible concern for the mother's emotional wellbeing were represented in the scenario, alongside possible indicators that the child may not be meeting developmental expectations. The scenario described was deliberately ambiguous, since the situations in which health and social care professionals typically need to weigh up contributing factors, assess risks, and act accordingly can typically be expected to be complex and uncertain.

The study had several specific objectives:

- 1) To investigate whether causal attributions and judgements about welfare concern and parenting capacity made by professionals about a situation are affected by the mother's age and/or SES, either alone or interactively.
- 2) To investigate the relationships between the causal attributions made about the situation and the judgements about welfare concern and parenting capacity, including whether causal attributions play a mediating role in the judgement ratings.
- 3) To assess whether the types of influential factors named as potentially involved in the situation and the support plans or appropriate next steps recommended by professionals are affected by the mother's age and/or SES, either alone or in combination.

Chapter 2: Methods

Epistemological positioning and justification of methodology

The study is positioned within the ontological stance of empirical realism. Consequently, epistemologically, it takes an etic approach and is deductive in its analysis. In the interests of full disclosure, it may be important to note that the researcher has personal experience of being a young parent; her own experiences of perceived stigma and those of her peers drew her interest to research in this area. However, the methodology chosen was deliberately predominantly quantitative in nature to minimise potential effects of personal bias or preconception on interpretation during analysis.

The study used a vignette methodology, which has been used extensively in research investigating attributions and decision-making (Barter & Reynold, 1999). This enables the description of a situation approximating one that may be encountered in real life, whilst allowing factors of interest to be varied and confounding factors to be controlled. As such, it is possible to investigate the potential influence of a characteristic of interest in the situation in a way that would not be readily distinguishable from the study of naturally occurring situations. In fact, given the association of young parenthood with many further factors of disadvantage, discerning the influence of age within the complexity of a naturally occurring situation would require the sampling of a huge number of such situations. Furthermore, such a method is vastly impractical and would be well beyond the scope of the current study.

Design

The study used a between-subjects 3 x 2 design to investigate the independent and interactive effects of maternal age and social class on causal attributions and decision-making concerning parenting scenarios by professionals working in health and social care. A short vignette describing an ambiguous situation in which there may be cause for concern about the

child's development and the mother's wellbeing was presented, with the mother's age and social class varied between participants. Participants were asked to rate their understanding of the situation in terms of their causal attributions, as well as making explicit judgements and decisions about appropriate next steps.

Procedure

Participants completed all measures online in a single session lasting approximately 10 minutes, using the survey platform Qualtrics (www.qualtrics.com/uk/research-core). Qualtrics offers a user-friendly platform, which enabled randomisation of vignette version presented through question piping or branching. The process followed by participants from recruitment to study completion is detailed below and illustrated in Figure 2.1.

Recruitment

Eligibility criteria specified that participants were over the age of 18 years and were currently working in the health and social care sector. Participants were recruited from across the UK via a recruitment advertisement which provided very brief details about the study aims and included a survey link, which potential participants could use to access the survey to take part (Appendix A). This advert was disseminated via two main routes: i) associations or professional bodies representing health and social care professionals disseminating the recruitment advert to their members in newsletters, emails, or via their social media platforms or websites, including subsequent resharing of the advert by members; and ii) snowball sampling via sharing of the advertisement via the researcher's personal contacts and through their social media, specifically Facebook, Twitter and WhatsApp. In regard to the first route, the organisations contacted are shown in Table 2.1, alongside the outcome of this contact.

Figure 2.1

Flowchart of the participant participation process.

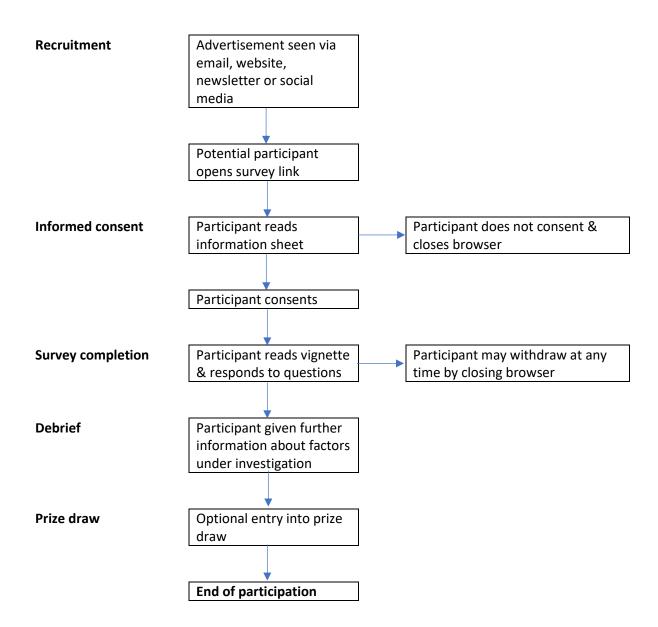


 Table 2.1

 Organisations contacted for dissemination of recruitment advert

Organisation name	Outcome of contact for recruitment					
British Psychological Society	Recruitment advert shared on Facebook and Twitter					
British Nursing Association	No response to several contact attempts					
Royal College of Midwives	Shared on Twitter on their research account					
Institute of Health Visiting	Email with recruitment advert sent to all members					
Community Practitioners and Health Visitors Association	No response to several contact attempts					
British Association of Social Workers	Shared on Twitter (retweeted researcher's recruitment post)					
Maternal Mental Health Alliance	Shared on Twitter (retweeted researcher's recruitment post)					
Royal College of Nursing	Fee for disseminating recruitment advert prohibited use					
Royal College of General Practitioners	Agreed to send in newsletter but did not respond to confirm this had been done					
Family Doctor Association	Fee for disseminating recruitment advert prohibited use					
Royal College of Occupational Therapists	Could not disseminate for non-members					
Association of British Paediatric Nurses	Shared in newsletter					
Unite Health Sector	Shared on Twitter					
British Association for Counselling and Psychotherapy	Could not disseminate for non-members					
Royal College of Psychiatrists	No response to several contact attempts					

Informed consent

Upon opening the survey link in the recruitment advertisement, participants were presented with a screen displaying the information sheet explaining the study (Appendix B). Although participants were told that the study was about how professionals make sense of and attribute causes for situations they may be presented with, it was necessary not to specify the factors under consideration (i.e. age and social class of mother) at this point. This was because informing participants of these factors may have affected the validity of the research findings, with participants likely to pay particular attention to these factors and attempt to override any biases they perceive themselves likely to have. Participants were advised to read the information carefully before continuing to the next page to participate or closing their browser if they did not wish to continue. The following page displayed a consent form, including several statements which had to be endorsed to confirm eligibility and agreement to take part in the study (Appendix C).

Survey completion

Following provision of consent, participants were asked to provide basic demographic information about their age, gender, job role and number of years they had been working in health and social care. They were then shown one version of the short vignette describing a parenting scenario, before being asked to complete a set of questions about their understanding of the events described. The vignette version (mother's age and social class combination) was semi-randomly assigned to ensure that each scenario was presented to approximately equal numbers of participants. This was done using the automatic randomisation option on the Qualtrics platform, which enables the randomisation to be performed with an even presentation of each randomised element. Each participant viewed only a single vignette with one combination of mother's age and social class for two reasons: to reduce the time burden of

participation, enabling a greater number of questions to be asked without fatigue effects; and to ensure that the factors under investigation were not immediately discernible through visible systematic manipulation, since knowledge of the factors may have influenced awareness and responses given. An example of the survey presentation is shown in Appendix D.

Questions were administered with a 'forced response', meaning that participants could not proceed through the survey until all questions had been answered. This ensured that, at least for multiple choice responses, analyses would not need to account for missing data. However, for qualitative responses it was not possible to validate what type of response the participant had entered, only that a text response of some form had been made.

Prize draw entry

After completing these measures participants wishing to enter the prize draw for a £50 Amazon voucher were asked to provide an email address via which they could be contacted if they won. Email addresses were stored separately from responses and were used solely for the purpose of conducting the prize draw. Entry into the prize draw was voluntary and participants could continue to the end of the survey without providing this information.

Debriefing

Following completion of the response measures, participants were provided with more detailed information about the study aims. This debriefing information included a brief outline of the rationale for varying age and class, based on previous qualitative research with young parents about perceived stigma and statistics regarding parental age in serious case reviews (Appendix E). Participants were thanked for taking part and the contact details of the researcher were provided again in case participants had further questions.

Measures

Demographic information

Participants were asked to select their age in years, gender identity, job role and the number of years of experience they had in the health and social care sector.

Vignette and question development

Feedback during the development of the vignette and response options was sought from student social workers (family and mental health) and assistant psychologists working in an adult mental health service where the researcher was on placement as a Trainee Clinical Psychologist. Further feedback and trial of the initial version of the survey was received from the cohort of Trainee Clinical Psychologists with whom the researcher was studying. Alterations made as a result of this feedback are discussed below.

Vignette

Vignette development was informed by several sources. Firstly, findings from qualitative research conducted with young parents about the types of situations in which they perceived stigma or feared unfavourable treatment from health and social care professionals, as described in Chapter 1, informed the scenario presented (e.g. Ellis-Sloan, 2014; Mental Health Foundation, 2013; DfCSF, 2009). Secondly, reports of serious case reviews, published on the NSPCC website, in particular those involving young parents (accessed at https://learning.nspcc.org.uk/case-reviews/), as well as training case studies published as part of the UK Governments Troubled Families Programme (Department for Education, 2012), were read to provide information about early ambiguous signs of potential cause for concern. Thirdly, information about the types of concerns which may indicate a need for additional

support and escalation from universal services in the Essex area was used to ensure that the vignettes adequately presented ambiguous cause for concern (Essex Safeguarding Children Board, 2017).

The vignette was designed to describe a situation in which cause for concern was ambiguous and therefore professionals would need to make a judgement as to the next actions that should be taken based on their own perceptions of the likely causes of the situation. Initially, the vignette focused mostly on possible slow development in the child. Feedback during development led to changes to the vignette to also include greater description of the mother's difficulties, since feedback from social workers indicated that they felt the vignette did not provide enough triggers for potential concern for those working in non-universal services and may lead to response-set or floor ratings or inability to rate. The final vignette therefore describes a child who appears to show some developmental delay and a mother who describes some symptoms which may indicate depression. Consequently, the situation is ambiguous as to whether there is cause for concern and, if so, as to whether the child's difficulties are interpreted as affecting the mother's mood, the mother's difficulties affecting the child's developing or as independent events.

Three age factors were included, with the age at birth of the mother being 15, 24 or 33 years of age. In the vignette the child described is two years old and consequently the mother's age is presented at 17, 26 or 35 years, respectively. Because of the association between young parenthood and concerns such as poverty and disadvantaged SES or social class, social class was varied to assess whether any effect of age is independent of SES. Social class was defined according to occupation with 'teacher' and 'student' used as a proxy for middle-class socioeconomic status, while 'unemployed' indicates a poorer background. 'Teacher' was used to avoid selecting an occupation in health and social care, but who could be expected to be of a similar background to this group of workers. Student was used since for the youngest age

group a professional job role would not be plausible, and the association in the UK between students in continuing education and class is high (Thompson, 2013). Feedback during development indicated that the occupational options provided as proxies for social class or SES were typically identified as intended. However, the cohort feedback raised concerns about the difference in occupational versus educational proxy for the younger and older mothers. In order to address this to some extent it was specified that Emma was 'studying for her A levels at a sixth form' rather than the more generic student as this reflected a form of education likely to indicate potential professional aspirations. It is recognised that this is imperfect as it is very difficult to adequately match the occupations of older mothers with those of younger mothers to provide information of comparable social class. However, socioeconomic positioning is understood to be related to differing factors at different life stages, with occupation being a major factor in middle adulthood, whilst young adulthood is predominantly defined by education (Galobardes, Shaw, Lawlor & Lynch, 2006; Galobardes, Lynch & Smith, 2007). Other proxies for social class such as housing status were equally inappropriate as it was deemed unlikely that any 17-year-old would be a homeowner. Names for the mother and child that have remained in common usage over the last few decades and do not have any strong class associations were used.

Owing to similar associations between ethnicity and marital status with young parenthood, socioeconomic positioning, and possible prejudice or stigmatisation, these factors were held constant, with the mother described as single and White British in the vignette.

Final vignette. The final vignette is shown below, with the varied factors of age and socioeconomic positioning indicated in brackets:

'Emma is a [17/26/35] year old White British single mother, who [works as a teacher/is studying for her A levels at sixth form/is unemployed]. Her daughter, Megan, is 2 years old. At Megan's two-year health check, concerns were raised about her development. Megan is small underweight for her age and appeared withdrawn. Megan does not yet appear to communicate verbally, with the exception of the use of the word "mama", and little interaction between Emma and Megan was observed. Emma reports that she has been struggling with low mood. She is tearful and describes finding daily tasks difficult and feeling overwhelmed.'

Measurement of attributions and decision making

Several scales to measure causal attributions have been developed for use in research and were considered for use in this study, including the Causal Dimensions Scale (CDS; Russell, 1982), Attributional Style Questionnaire (ASQ; Peterson et al., 1982) and the Internal, Personal and Situational Attribution Questionnaire (IPSAQ; Kinderman & Bentall, 1996).

The ASQ, which is perhaps the most commonly used scale in attribution research, and the IPSAQ were designed and validated for causal attributions made about one's own experiences and describe a number of short, typically single sentence, scenarios, including both positive and negative events, such as losing a job or passing a test. Responses are then summed across all the items to produce an attributional style score for the person's understanding of their own experiences. As such, there are few questions per item, but many items to rate. In particular, the IPSAQ asks only for a single choice as to whether each situation is caused by something about the self, others or the situation, without considering other dimensions of

attributions, such as stability. Of this form of attributional style questionnaires, the Attributional Style Questionnaire has been adapted for use in research understanding the causal attributions of others' behaviour, such as investigating carer attributions for challenging behaviour in learning disability populations (e.g. Dagnan et al., 1998; Weigel et al., 2006). However, this adaptation still typically requires several different scenarios to be presented. As such, these questionnaires did not appear easily adaptable to the current study, where a more in-depth understanding of a single scenario was investigated.

The CDS is an alternative scale which, while developed to assess causal attributions of one's own experiences, is more amenable to adaptation to consider a single scenario. An adapted version of the scale was used by Kyne & Williams (2007) for investigating the causal attributions given to others' actions, in order to assess whether attributions made by therapists who worked with forensic populations were influenced by the gender of the offender. Kyne and Williams (2007) extended their investigation of causal attributions for crimes by asking further questions about the real-life decisions that therapists may go on to make, such as sentencing recommendations and treatment plans.

Other studies investigating factors influencing how professionals make sense of situations they encounter have instead focused on the more explicit judgements and decisions about the situation that professionals may be required to make. One such study used a factorial design to assess health visitors' ratings of 'good enough' parenting on a 1-10 scale (Taylor et al., 2009), while another asked professionals to rate the likelihood that they would perceive an action against an older adult as 'abuse' by a carer and whether they would report it (Killick & Taylor, 2011). However, these latter studies did not investigate the causal attributions involved in understanding the situation and their influence on these decisions.

The study reported in this thesis aimed to explore how maternal age and SES may influence both causal attributions and more explicit judgements and decision-making,

including how the former may influence the latter, made by health and social care professionals in their interactions with mothers. Consequently, the current study combined measurement of causal attributions with further questions about more explicit judgements of the situation and further steps in combination, in a similar format to that employed by Kyne & Williams (2007).

Adapted causal dimensions scale. The CDS, as originally proposed was comprised of three factors: locus of causality, controllability and stability. However, following concerns that the internal consistency of the controllability dimension was inadequate, the scale was revised to improve its psychometric properties (CDS-II; McAuley et al., 1992). Rather than combining controllability by the self and others under a single factor, this revised scale subdivided the controllability factor into two factors: personal and external control. In a series of validation studies, new items were tested, and the superior reliability of the new four-factor structure was confirmed (McAuley et al., 1992).

The CDS-II is a 12-item scale which asks for participants to first name the most important causes of a situation and then rate the causal attributions of these reasons on 12 items. These items are bipolar statements (e.g. permanent vs. temporary) anchored at either end of a 1-9 Likert-type scale. The scale comprises four factors or dimensions: locus of causality, external control, personal control, and stability. Responses for each item within a dimension are summed to produce a total score for each dimension.

Validation studies of the CDS-II using varied situations, reported in McAuley et al. (1992), included performance on an exam and various sports-related performances. These confirmed the four-factor fit and item factor loadings and found the internal consistency of each factor scale to be acceptable (Cronbach's alpha \leq .67). As would be predicted, given that high controllability, high stability and high internal locus of control together have been argued

to indicate high personal responsibility (Ewart & Pennington, 1987), the subscales were found to be significantly intercorrelated.

The scale items were adapted from a self-rating scale to rating of the mother-child situation presented in the vignette, by changing reference to the self in the scale items to reference the mother. This is similar to the adaptation of the scale by Kyne and Williams (2007) to investigate understandings of the cause of a crime. The adapted scale items and the subscale factors are shown in Table 2.2.

Ratings of welfare and next steps. Following the ratings on the CDS-II, participants were asked to respond to three further items. Firstly, participants were asked to rate the extent to which they would be concerned about the welfare of the mother and the child separately on a scale from 0-10, where 0 is anchored at 'not concerned at all' and 10 indicates 'very concerned'. Welfare was explicitly defined as 'wellbeing and safety'. Participants were then asked to rate their impression of the mother's capacity to parent on a 0-10 scale from 'very low' to 'very high'.

Finally, participants were asked to make a recommendation about what the next steps or ongoing support plan should be using free text. Initially this question asked participants to identify the next steps that they would take if they were to come across the situation in the course of their own work. However, feedback during development suggested that answering this question was difficult owing to the same vignette being used across job roles, with some professionals unlikely to encounter the precise situation within their particular roles. As such the wording was altered to ask more generally about the next steps they felt would be appropriate.

Table 2.2 *Adapted Causal Dimensions Scale Revised and item factors*

What causes or factors do you think are most likely to have influenced the situation described?

Please think about the reason(s) you have written above. The items below concern your impressions or opinions of the cause(s) of the situation. Please select one answer for each of the following questions.

Is the cause(s) something:

1.	That reflects an	9	8	7	6	5	4	3	2	1	Reflects an aspect of
	aspect of the mother										the situation
2.	Manageable by the	9	8	7	6	5	4	3	2	1	Not manageable by
	mother										the mother
3.	Permanent	9	8	7	6	5	4	3	2	1	Temporary
4.	The mother can	9	8	7	6	5	4	3	2	1	The mother cannot
	regulate										regulate
5.	Over which others	9	8	7	6	5	4	3	2	1	Over which others
	have control										have no control
6.	Inside the mother	9	8	7	6	5	4	3	2	1	Outside the mother
7.	Stable over time	9	8	7	6	5	4	3	2	1	Variable over time
8.	Under the power of	9	8	7	6	5	4	3	2	1	Not under the power
	other people										of other people
9.	About the mother	9	8	7	6	5	4	3	2	1	About others
10.	Over which the	9	8	7	6	5	4	3	2	1	Over which the
	mother has power										mother has no power
11.	Unchangeable	9	8	7	6	5	4	3	2	1	Changeable
12.	Other people can	9	8	7	6	5	4	3	2	1	Other people cannot
	regulate										regulate

Items per factor: 1, 6, 9 = locus of causality; 2, 4, 10 = personal control; 5, 8, 12 = external control; 3, 7, 11 = stability.

Analysis

Statistical analysis was carried out using the statistical analysis program SPSS Statistics 25 (IBM Corporation). Data were exported from Qualtrics into SPSS via the inbuilt exportation options on the survey platform.

Analysis of quantitative data

Main analyses. For the CDS-II ratings, a confirmatory factor analysis and principal components analysis were conducted, using SPSS AMOS 25 and SPSS Statistics 25 (IBM Corporation) software respectively, to confirm that the factor structure of this adapted form of the CDS-II was consistent with that of the original CDS-II.

To assess the main and interactive effects of mother's age and social class, 3 x 2 ANOVAs were conducted on the CDS-II subscale scores and ratings of welfare and parenting capacity. A false discovery rate (FDR) correction was applied to control for multiple comparisons using the Benjamini-Hochberg method (Ferreira & Zwinderman, 2006) for each ANOVA. This included applying this correction to the main and interaction terms as well as to families of post hoc tests, since these are not otherwise corrected for within a multiway ANOVA and therefore pose a risk of Type I inflation (see Cramer et al., 2016).

Exploratory analyses. Exploratory analyses further considered potential relationships between causal attributions and the judgements regarding welfare and parenting capacity. For the exploration of relationships between attributions and judgements, correlations were first used to identify significant pairwise associations, with FDR correction applied to account for the multiple correlational analyses undertaken on the risk of Type I error. Mediation analyses were then undertaken since the hypothesis was that professionals would make different causal

attributions based on the mother's age and social class, and these attributions would in turn influence different judgements. However, for attribution scores to be a mediatory factor in the relationship between mother's age and SES and ratings of concern and parenting capacity, it would be necessary for there to be an association between mother's age and SES and attribution scores and between attribution scores and ratings of concern and parenting capacity in addition to the direct relationship between mother's age and SES and these ratings (Hayes, 2017; de Nooy, 2020). Therefore, mediation analyses were only carried out on associations that met these criteria. Those that did were analysed using the using the PROCESS macro for SPSS (Version 3) which uses a path regression model to assess estimate mediation effects (Hayes, 2017).

Analysis of qualitative data

Participant's answers to the two qualitative questions, concerning causes or factors influencing the situation and suggested next steps or support plan, were analysed using content analysis. This was undertaken using a conventional approach to content analysis in which the codes are defined during the analysis stage and constructed from the data through a refinement process in which initial codes are organised into meaningful categories (Hseih & Shannon, 2006). The development of categories for each of the questions are therefore described as outcomes in their own right in the *Results* section of this thesis. Following the development of categories, the decision was taken to code each answer according to the presence or absence of factors encompassed by each category rather than to code the number of instances of that category per answer. This was done because the varying level of detail in participants' responses meant that following the latter strategy may have been invalid. For example, for the first open-ended question about causes or factors influencing the situation, one of the categories identified was additional developmental or health needs in the child;

some answers cited this factor at this categorical level, whilst others listed several potential and more specific developmental or health issues within the category. If each answer was coded for the number of instances of each category within that answer, the one referring to the cause at a categorical level would have scored only one, whilst the second type of answer would have scored higher. However, this would not necessarily represent the data provided in the answer in a meaningful way. Consequently, coding took the binary absence or presence approach to the categories described, with this data therefore represented by the percentage of answers referencing each category.

Statistical analysis of associations between the likelihood that participant's answers encompassed each of the identified categories and the age and SES of the mother in the vignette, both alone and in combination, was conducted using appropriate models for categorical data. Specifically, loglinear analyses were first employed where assumptions were met, modelling the associations of both mother's age and SES on whether or not answers encompassed a given category. Since loglinear analysis is a hierarchical model, which sequentially tests and retains higher to lower order effects, it is not possible to look for lower order models within it once a higher order model has been identified. Therefore, when no interaction effect was found between maternal age and SES in combination and the likelihood of answers including that category, it was possible to move on to consider whether the model instead identified associations with mothers' age and SES alone. However, when an interactive influence of these factors was found, it was necessary to conduct separate chisquare analyses to consider separately the presence of a main effect of mother's age or SES. As a more exploratory analysis, significance is reported at the uncorrected p < .05 level, however whether any identified associations would remain significant after FDR correction is discussed.

Interpretation of analyses regarding study aims and hypotheses

The main study aim was to assess whether age and social class either independently or interactionally affect the causal attributions, judgements and decision making made by health and social care professionals. If these factors do systematically bias responses by professionals, this will be evidenced by the finding of significantly differing responses dependent on the age and social class factors presented to participants in the version of the vignette seen.

Within this aim, two further sub-hypotheses were proposed: that professionals may give higher weight to the mother's vulnerability when the mother is of a younger age and that expectations of parenting ability may also be lower. These analyses further investigated these hypotheses. Increased weight given to the vulnerability of the mother may be reflected in higher ratings of concern about the mother's welfare when the mother is younger than when the same scenario is rated for an older mother. Professionals may also be expected to rate reduced control over the situation by the mother and increased external control over the situation, indicating more control by others, or as having a greater external locus of causality (i.e. something about the situation rather than within the mother). Lower expectations of parenting ability may be reflected by professionals making more stable attributions about the causes of the situation and a greater internal locus of causality could be indicated. Professionals may also be more likely to give lower ratings of parenting capacity, rate concern for the child's welfare as higher, or recommend next steps or likely outcomes which suggest reduced expectations of what the mother may be able to achieve.

Participants

A priori power analysis

An a priori sample size calculation was conducted for the quantitative analyses, using GPower 3.1 (Faul, Erdfelder, Lang, & Buchner, 2007), assuming a small-medium effect size of f = 0.2, $\alpha = .05$ and Power $(1-\beta) = .8$, with analysis employing a 2 x 3 ANOVA. These parameters were selected according to norms for acceptable Type I and Type II error in research of this nature (i.e. not clinical trials) (Jones, Carley, & Harrison, 2003; Hickey, Grant, Dunning, & Siepe, 2018). This estimated a required sample size of N = 244.

Sample and population

In total 275 participants completed the survey. Demographic data describing the sample is shown in Table 2.3. These indicate that participants were recruited from across the age range for working life, with a mean age approximately in the middle of this range. There was a distinct gender imbalance, with a markedly greater representation of females than males in the sample. Only a very small proportion of individuals either opted to withhold this information or did not identify within a gender binary (n = 1 for each of these options) and this was collapsed into a single 'other' category.

Considering more job-specific information, participants' years of experience varied with a large overall range. However, the distribution of this was positively skewed, indicating that the majority of participants had experience towards the lower end of this range, with a mean of 12.81 years and a median of nine years. More participants taking part were qualified already than those still in training.

Table 2.3

Demographic data describing the sample

	Sample characteristics				
N	275				
Age (years)					
Mean (SD)	42.34 (11.56)				
Median	42.00				
Minimum	21				
Maximum	65				
Range	44				
Gender (%)					
Male	9.09				
Female	90.18				
Other	0.36				
Years of experience					
Mean (SD)	12.81 (10.13)				
Median	9.00				
Minimum	1				
Maximum	32				
Range	31				
Qualified status (%)					
Qualified	89.82				
Student/trainee	10.18				

SD: standard deviation.

Professions were recoded from the large number of job title options and answers into fewer categories in order to meaningfully represent them. The recoded professional groups, the number of participants within each, and the original job titles encompassed by these groups is shown in Table 2.4.

 Table 2.4

 Professional groupings as recoded from job titles and numbers within each group

n	Job titles included			
44	Mental Health Nurse; Paediatric Nurse;			
	Adult/General Nurse; Midwife; Family Nurse;			
	Healthcare Assistant/Associate			
91	Health Visitor; Safeguarding Advisor with Health			
	Visitor background			
12	Social Worker			
23	GP; Psychiatrist; Paediatrician; Audiolo24gist;			
	Junior Doctor; Consultant; Hospital			
	Doctor/Registrar; Anaesthetist; Surgeon;			
80	Clinical Psychologist; Educational Psychologist;			
	Counselling Psychologist; Psychotherapist;			
	Psychological Wellbeing Practitioner; CBT			
	Therapist; Assistant Psychologist; Counsellor;			
25	Occupational Therapist; Speech and Language			
	Therapist; Physiotherapist; SENCO Specialist;			
	Dietician; Specialist Medical Case Manager;			
	Mental Health Researcher; Paramedic; Mental			
	Health Support Worker; Family or Project Worker			
	4491122380			

Ethical Considerations

Ethical approval was obtained from the University of Essex Ethics Committee (Ref. 18008; Appendix F). Formal service approval for dissemination of the recruitment advert was not needed from any of the relevant organisations who agreed to do so; however, ethical approval and protocol documentation was submitted on request.

Informed and voluntary consent

The voluntary nature of participation and right to withdraw at any time by closing the browser window was made explicit in the information given to participants before taking part. However, owing to the anonymity of responses since no personal identifiable data was collected, participants were informed that it would not be possible to remove their responses from the data set once they had completed the survey.

Given the nature of the research question, it was necessary for the initial information to withhold the exact purpose of the variables under study. Consequently, participants were initially only given basic information about the aims of the study, without specifying the factors of interest. Following completion of responses, participants were taken to a further screen in which additional details of the study aims were presented, in line with British Psychological Society (BPS) guidelines for debriefing participants where initial withholding of information is necessary for the research (BPS, 2014).

Participants were not paid to take part in the study: however, they were offered the opportunity to enter a prize draw for a £50 Amazon voucher in gratitude for taking part. The small likelihood of any individual receiving this reward was felt to reduce the chance that participants felt persuaded to take part owing to a monetary incentive rather than freely consenting.

Other Ethical Implications

This study aimed to assess whether the mistrust of and perceived judgement from professionals and services expressed by some young mothers is a valid concern. If no bias was found, this positive information could be fed back to both professionals and young mothers, with the aim of helping to alleviate mistrust of services and enhancing engagement. However, it was important to consider the alternate possibility of a bias according to mother's age or class

being identified; in this event, the information may be sensitive but may have important practical implications for working with young mothers and their children. Awareness of factors influencing the decision making carried out by professionals is important in improving safeguarding, particularly if attributional biases may be implicated in the statistics concerning serious case reviews.

Dissemination

The findings of this research will be disseminated in several ways. Initially, the research has been submitted in the form of this thesis as part of the Doctorate in Clinical Psychology training course at the University of Essex. It will also be disseminated in research journals relevant to the fields of health and social care. A short summary will also be sent to the associations and bodies that distributed the recruitment advert.

Chapter 3: Results

Chapter Overview

This chapter reports the results from the study. It confirms that the factor structure of the CDS-II as adapted for this study is adequately represented by the original subscale structure. The quantitative data regarding causal attributions about the situation presented in the vignette and judgements about welfare concerns and parenting capacity are then reported, with analyses investigating whether these outcomes are influenced by the age and SES of the mother. Exploratory analyses are subsequently described, considering the relationships between the attributional subscale scores and the judgements made about welfare concern and parenting capacity. Finally, qualitative data regarding causes and ongoing support plans are summarised using content analysis and potential differences influenced by the age and/or SES of the mother in the vignette version examined.

Confirmation of Adapted CDS-II Factor Structure

Prior to analysis of the data, it was necessary to assess any impact of the adaptations made to the CDS-II for use in this study on the assumed subscale structure. Firstly, descriptive statistics were calculated and data were visualised to identify any outliers, with skewness and kurtosis assessed for each item score and considered to be within the limits of a normal distribution if they were between -2 and 2 (Table 3.1).

Table 3.1Descriptive statistics for Adapted CDS-II items across entire sample (N = 275)

	Mean	Median	Min	Max	Skewness	Kurtosis
	(SD)					
Item 1	5.13 (2.20)	5.00	1	9	-0.07	-0.57
Item 2	5.53 (1.60)	5.00	1	9	-0.23	-0.13
Item 3	6.61 (1.60)	7.00	1	9	-0.55	0.37
Item 4	5.73 (1.72)	6.00	1	9	-0.12	0.15
Item 5	4.73 (1.80)	5.00	1	9	0.13	-0.25
Item 6	5.00 (1.70)	5.00	1	9	-0.03	0.14
Item 7	6.51 (1.79)	7.00	1	9	-0.79	0.43
Item 8	5.09 (1.63)	5.00	1	9	0.07	0.30
Item 9	4.39 (1.57)	5.00	1	9	0.05	0.40
Item 10	4.92 (1.59)	5.00	1	9	-0.09	0.51
Item 11	7.33 (1.57)	8.00	1	9	-1.20	2.07
Item 12	4.76 (1.60)	5.00	1	9	0.09	0.47

SD: standard deviation.

Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) tests the goodness-of-fit of data to a predefined or hypothesised factor structure as is the case for the CDS-II. The model tested is shown in Figure 3.1 and included all 275 participants. This analysis provides a variety of statistics assessing goodness-of-fit. There are debates within the field about which values indicate acceptable goodness of fit as discussed below.

Chi-square is a discrepancy goodness-of-fit index which should be non-significant. In this analysis the chi-square value was significant (98.30, p < .001). However, in large samples this is likely to be significant when only a small discrepancy is found (Jöreskog, 1969; Deilkås & Hofoss, 2008). Consequently, in addition, a further criterion has been suggested based upon the chi-square/degrees of freedom ratio, with acceptable values posited

to range from under 2 to under 5 (Deilkås & Hofoss, 2008; Al-Balhan *et al.*,2018). For this analysis this ratio was 2.05, which is only just above the most stringent criterion and thus indicated adequate goodness-of-fit.

Root Mean Square Error of Approximation (RMSEA) is a residuals-based index which should be equal to or below 0.10 (Al-Balhan *et al.*, 2018; Deilkås & Hofoss, 2008; Browne & Cudeck, 1992; Toll *et al.*, 2006;), with 0.01, 0.05 and 0.08 suggested to show excellent, good and adequate fits (MacCallum *et al.*, 1996; Steiger, 2000). For the current model the RMSEA was 0.06, with a 90% confidence interval range from 0.04-0.08, which indicates good to adequate fit.

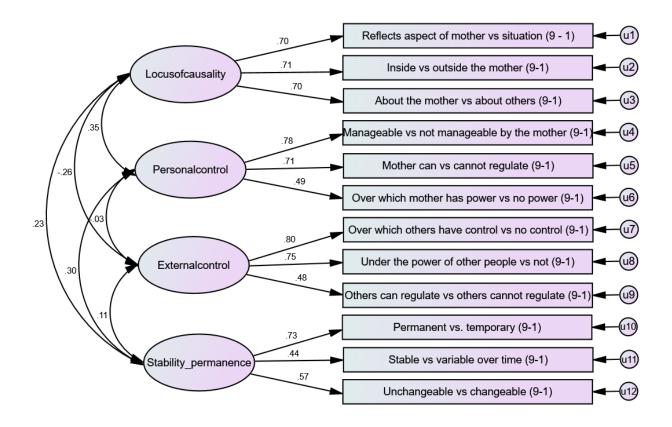
Other tests compare more directly with the null model, and include the normed fit index (NFI), Bentler's comparative fit index (CFI) and Tucker-Lewis's index (TLI), which range between 0-1, with values closer to 1 indicating better fit. Values above 0.90-0.95 have been suggested as indicating acceptable fit (Byrne, 1994; Schumacker & Iomax, 2004 (Bentler, 1990; Al-Balhan *et al.*, 2018; Toll *et al.*, 2006). In the current analysis two of these statistics reached this criterion and the third was not markedly below (NFI = 0.87; CFI = 0.93; TLI = 0.90).

Finally, some statistics are based on predictive fit such as log likelihood, including the goodness-of-fit index (GFI), with GFI greater than 0.9 suggested to indicate acceptable fit (Byrne 1994; Al-Balhan *et al.*,2018). This criterion was met for this model (GFI = 0.94).

Overall, this analysis, therefore, appears to support the four-factor model identified by McAuley *et al.* (1992). However, this was not unanimous, with some measures suggesting that fit did not quite meet adequacy criteria, although no statistic diverged markedly from accepted criteria.

Figure 3.1

Confirmatory factor analysis model and standardised estimates of the item loadings per factor and factor correlations.



Principal Components Analysis

Given that findings from the CFA were not unanimous, an exploratory factor analysis was carried out using a principal components analysis (PCA). This is a data-driven approach which aims to uncover factors within the data, rather than assessing the fit of a predefined structure. The use of this approach following an equivocal CFA has been previously described by Al-Balhan *et al.* (2018).

This analysis included all 275 participants' responses to the 12 adapted CDS-II items. Since the factors can be expected to have some degree of correlation, a direct oblimin factor rotation was used, with the delta value set at 0. The Kaiser-Meyer-Olkin measure confirmed

the sample was adequate for this analysis, KMO = .79 ('good' as defined by Hutcheson & Sofroniou, 1999; Field, 2009) and all items had KMO values above .5, which Field (2009) suggests is the acceptable lower limit. Bartlett's test of sphericity showed that correlations between items were adequate for PCA, χ^2 (66) = 1080.28, p < .001.

Eigenvalues were extracted according to Kaiser's criterion of being over 1.00 (Field, 2009). This identified a four-factor solution which explained 68.04% of the variance. The scree plot was also assessed to consider the number of factors at the point of inflection (Figure 3.2); this showed a point of inflexion supporting a four-factor structure as most adequately representing the data.

Furthermore, the four-factor solution identified by this analysis largely corroborates the factor structure identified by McAuley *et al.* (1992) (Table 3.2, Figure 3.1), with factors one to four representing locus of control, external control, stability and personal control respectively. The only item which loaded onto an alternative factor to the proposed subscales was 'stable vs. variable over time', which instead loaded onto factor 4, which contained the personal control subscale items rather than onto the stability subscale. It is unclear why this would be the case as the original structure would appear to have greater face validity in including this in the stability subscale, however it is noted that this is the lowest factor loading in the model.

Acceptance of the Original Subscales

Considered together, the CFA and the PCA appear to provide strong enough support for accepting the questionnaire structure proposed by McAuley *et al.* (1992) as comprising four subscales, each made up of three items (refer to Table 2.1; Figure 3.1). Consequently, the original subscale structure was accepted for this study and items scores were summed to produce subscale scores used for the analysis of the CDS-II.

 Table 3.2

 Pattern matrix of components

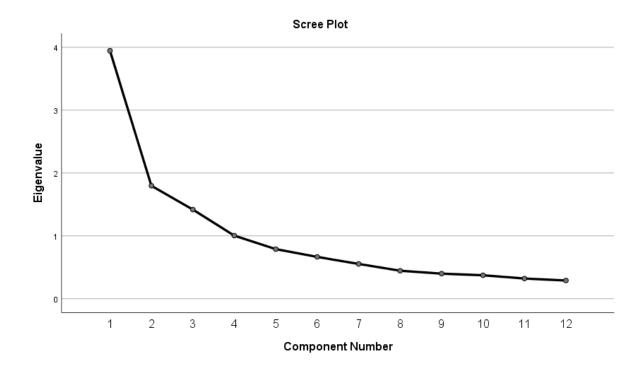
		Com	ponent	
Adapted CDS-II Item	1	2	3	4
About the mother vs about others	.871			
Reflects aspect of mother vs situation	.816			
Inside vs outside the mother	.795			
Others can regulate vs others cannot regulate		.823		
Over which others have control vs no control		.790		
Under the power of other people vs not		.771		
Permanent vs temporary			862	
Unchangeable vs changeable			814	
Manageable vs not manageable by the mother				861
Mother can vs cannot regulate				850
Over which mother has power vs no power				632
Stable vs variable over time				442 ^a

All items scored on scale from 9 (left anchor) to 1 (right anchor).

^aItem is the only item found to load onto another factor to that proposed by the original structure.

Figure 3.2

Scree plot from principal components analysis



Scree plot from principal components analysis showing the point of inflexion as occurring at a four-factor model.

Demographic Differences in Sample Groupings

The major factors of interest in this study were the age and SES of the mother presented in the vignette. The study was interested in both potential independent and interactive effects of these characteristics on the ratings given by health and social care professionals concerning their understandings of the situation. The six vignette versions enabled a 3 x 2 between-participants design in order to investigate this research question by looking at the main effects of age and gender as well as the interaction between the two (i.e. each vignette). Consequently, participants were also recoded into three groups according to age of mother and two groups according to the SES of mother in the vignette seen to examine main effects.

Each participant saw one of six vignette versions, in which the age and SES of the mother was varied. The version presented was randomly assigned and therefore it was necessary to consider whether there may be demographic differences between those seeing each vignette or age or SES of the motherthat may present a confound to interpreting the findings.

Demographic Differences According to Vignette Version

The number of participants assigned to each vignette version and descriptive statistics for age, gender, years of experience and qualification status for participants grouped by the vignette versions are presented in Table 3.3. Statistical tests for differences between the groups for each of these characteristics were conducted according to the type of data and with reference to assumptions of normality and homogeneity of variance. These analyses showed that groups did not differ significantly for any of these characteristics. Similarly, while exact numbers of participants per vignette version was not equal, no one vignette had significantly greater or fewer participants.

Demographic Differences According to Age and SES of Mother in Vignette

The number of participants and descriptive statistics for age, gender, years of experience and qualification status grouped by the mother's age and SES in the vignette viewed are presented in Table 3.4 and Table 3.5, respectively. Statistical tests for differences between these groups for each of these characteristics were conducted according to the type of data and with reference to assumptions of normality and homogeneity of variance. These analyses showed that groups did not differ significantly for any of these characteristics, nor were the number of participants significantly unequal.

Table 3.3

Demographics by vignette version

	V1	V2	V3	V4	V5	V6	Test statistic
N	42	51	38	43	48	53	2 (5) 2 (4
(%)	(15.3)	(18.5)	(13.8)	(15.6)	(17.5)	(19.3)	χ^2 (5) = 3.64, ns
Mean age	42.17	42.45	44.05	42.63	42.04	41.19	F (5. 260) 0.20
(years, SD)	(13.19)	(12.28)	(10.76)	(9.77)	(9.95)	(9.24)	F(5, 269) = 0.28, ns
Gender (%)							
Male	9.5	5.9	7.9	11.6	10.4	9.4	2 (5) 1 17 8
Female	88.1	94.1	92.1	88.4	89.6	88.7	$\chi^2(5) = 1.17, ns^a$
Other	2.4	-	-	-	-	1.9	
Mean experience	14.88	12.06	13.71	13.72	11.83	11.38	H (5) 2.72
(years, SD)	(11.28)	(10.13)	(10.76)	(9.77)	(9.95)	(9.23)	H(5) = 3.72, ns
Qualified status (%)							
Qualified	85.7	92.2	92.1	93.0	85.4	90.6	$\chi^2(5) = 2.82$, ns
Student/trainee	14.3	7.8	7.9	7.0	14.6	9.4	

SD: standard deviation; ns: not significant at the p < .05 level.

 $^{^{}a}Other$ (n = 2) excluded from analysis as expected count below 5 for all cells.

 Table 3.4

 Demographics of sample by age of mother in vignette

		Age of moth	er	Test statistic
	17 years	26 years	35 years	_
N (%)	93 (33.8)	81 (29.5)	101 (36.7)	χ^2 (2) = 2.21, ns
Mean age	42.32	43.30	42.59	H (2) 0 00
(years, SD)	(12.63)	(11.29)	(10.78)	H(2) = 0.90, ns
Gender (%)				
Male	7.5	9.9	9.9	$\chi^2(2) = 0.40, ns^a$
Female	91.4	90.1	89.1	
Other	1.1	-	1.0	
Mean experience	13.33	13.72	11.59	H (2) 2.20
(years, SD)	(10.70)	(10.18)	(9.53)	H(2) = 2.28, ns
Qualified status %)				
Qualified	89.2	92.6	88.1	$\chi^2(2) = 1.03$, ns
Student/trainee	10.8	7.4	11.9	

SD: standard deviation; ns: not significant at the p < .05 level.

^aOther (n=2) excluded from analysis as expected counts below 5 for all cells.

Table 3.5

Demographics of sample by socioeconomic status of mother in vignette

	SE	ES	Test statistic
	Working class	Middle class	
N (%)	147 (53.5)	128 (46.5)	χ^2 (1) = 1.31
Mean age (years, SD)	42.05 (11.41)	42.68 (11.76)	U = 9,705.00, z = .45, ns
Gender (%)			
Male	8.8	9.4	.2 (1) 0.02 2
Female	90.5	89.9	$\chi^2(1) = 0.02, ns^a$
Other	0.7	0.8	
Mean experience	12.30	13.39	W 0.067.00 70
(years, SD)	(9.69)	(10.63)	U = 9,867.00, z = .70, ns
Qualified status (%)			
Qualified	91.8	87.5	$\chi^2(1) = 1.41, ns$
Student/trainee	8.2	12.5	

SD: standard deviation; ns: not significant at the p < .05 level; SES: socioeconomic status.

^aOther (n= 2) excluded from analysis as expected count below 5 for all cells.

Effects of Age and SES of Mother on CDS-II Attribution Scores

Four 2 x 3 factorial ANOVAs were conducted: one, respectively, for each of the four CDS-II subscales to assess for main and interactive effects of age and social class of the mother presented in the vignette on these subscale scores. Assumptions upon which ANOVA is based were first checked, using histograms, consideration of skew and kurtosis values, and Shapiro-Wilk tests to ascertain whether data for each group deviated significantly from the normal distribution. This confirmed all sample subgroups sufficiently approximated the normal distribution (per vignette version, per age and per SES), with the exception of the stability scores within the overall working-class group and the group seeing the 26-year-old working-class mother which were both leptokurtic. Nevertheless, these were not extreme or deviations from normality and all groups included at least 30 participants (minimum = 38) in the case of these leptokurtic groups, this was 147 and 43 participants, respectively. Therefore, since the assumption of normality for ANOVA corresponds to sampling distribution normality for which sample normality is used as a proxy, it is possible to rely on the Central Limit Theorem to assume adequate normality of data for the purposes of statistical analysis here, especially since no distribution was platykurtic (for discussion see Field, 2009). Levene's tests demonstrated adequate equality of variance for all ANOVAs.

Locus of Causality

Descriptive statistics for the locus of causality subscale according to age of the mother in the vignette, social class of the mother, and which of the six vignette versions was seen are presented in Table 3.6. The means and dispersion of locus of causality scores across these groups were broadly similar, with the exception of mean subscale scores for the group seeing the 26-year-old mother, which were lower than that of either other the 17- or 35-year-old mother (Figure 3.3a), suggesting a possible influence of age of the mother. However, when

explored using a 2 x 3 ANOVA, no significant main effect of age was found, F(2, 269) = 2.21, p = .112. Similarly, there was no significant main effect of SES, F(1, 269) = 0.114, p = .736, or interaction effect between age and SES on locus of causality scores was found, F(2, 269) = 0.068, p = .934. Thus, this indicated that neither age of the mother nor social class had a main or interactive influence on locus of causality attributions.

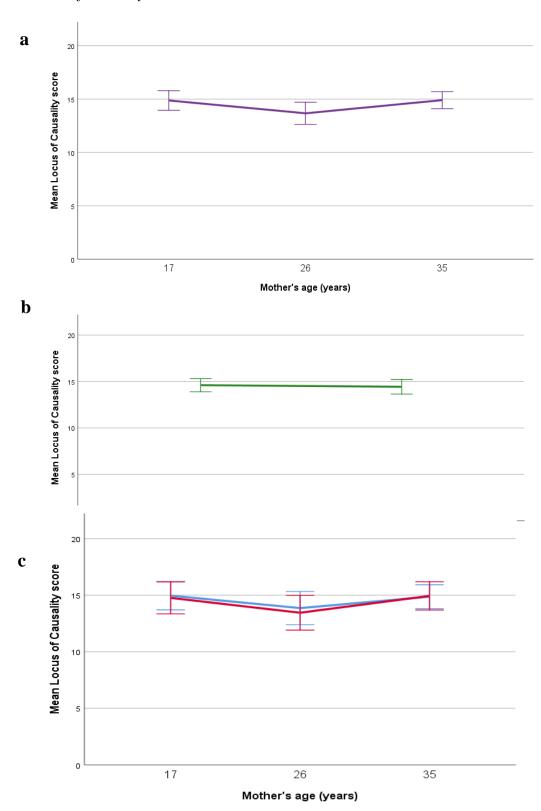
Table 3.6

Descriptive statistics for the locus of causality subscale per age, social class, and vignette

	N (%)	Mean (SD)	Median	Min	Max	Skewness	Kurtosis
Age of mother							
17 years	93 (33.8)	14.87 (4.48)	15.00	3	27	0.04	.37
26 years	81 (29.5)	13.67 (4.70)	14.00	3	25	.02	03
35 years	101 (36.7)	14.90 (4.04)	15.00	3	23	43	.41
SES							
WC	147 (53.5)	14.61 (4.34)	15.00	3	25	20	.30
MC	128 (46.5)	14.44 (4.51)	15.00	4	27	12	.10
Vignette version							
1 (17y, MC)	42 (15.3)	14.76 (4.54)	15.00	5	27	.00	1.09
2 (17y, WC)	51 (18.5)	14.96 (4.48)	15.00	3	24	08	06
3 (26y, MC)	38 (13.8)	13.45 (4.67)	15.00	4	24	.15	.03
4 (26y, WC)	43 (15.6)	13.86 (4.77)	15.00	3	25	09	10
5 (35y, MC)	48 (17.5)	14.94 (4.31)	15.00	5	23	45	18
6 (35y, WC)	53 (19.3)	14.87 (3.82)	15.00	3	23	41	1.37

Figure 3.3

Mean locus of causality subscale scores



Mean locus of causality subscale scores for a) age of mother in vignette seen, b) SES of mother in vignette seen, and c) combination of age and SES of mother in vignette seen (i.e. vignette version). Error bars: 95% confidence interval.

Personal Control

Descriptive statistics for the personal control subscale within each group divided by the age of the mother in the vignette viewed, SES of the mother, and the six vignette versions are presented in Table 3.7. These suggest that when the mother presented was aged 26 years, ratings of personal control were lower than ratings for both the 17-year-old and 35-year-old mother (Figure 3.4a). There also appears to be a difference between the two versions of the vignette depicting the 17-year-old mother vignettes, with personal control rated lower when this mother was presented as middle class compared to when the mother was presented as working class in the vignette, suggesting a potential interactive effect of age and SES (Figure 3.4b). Overall, however, the ratings for when the mother was presented as working class compared to middle class appear very similar (Figure 3.4b).

These observations of differences indicated by the data were partly confirmed using a 2 x 3 ANOVA, which found a significant main effect of age on personal control scores, F (2, 269) = 4.34, p = .014, p_{adj} = .042, but no significant main effect of SES, F (1, 269) = 2.77, p = .097, p_{adj} = .146. However, despite the apparent difference in personal control scores according to SES for vignettes depicting the 17-year-old mother, no interactive effect between SES and age of the mother was found, F (2, 269) = 1.65, p = .194, p_{adj} = .194. It is perhaps notable that the interaction analysis has less power since the sample is divided into more groups of fewer participants, but nevertheless indicates this difference is not significant.

T-tests conducted to investigate the main effect of age found that the group who viewed the vignette version with the 26-year-old mother made significantly lower ratings of personal control compared to both the version with the 17-year-old, t (172) = 2.37, p = .019, p_{adj} = .029, and the 35-year-old mother, t (180) = -2.850, p = .005, p_{adj} = .015. The ratings of personal control for the 17- and 35-year-old mothers did not significantly differ from each other, t (192) = -0.487, p = .627, p_{adj} = .627. This indicates that participants rated the oldest

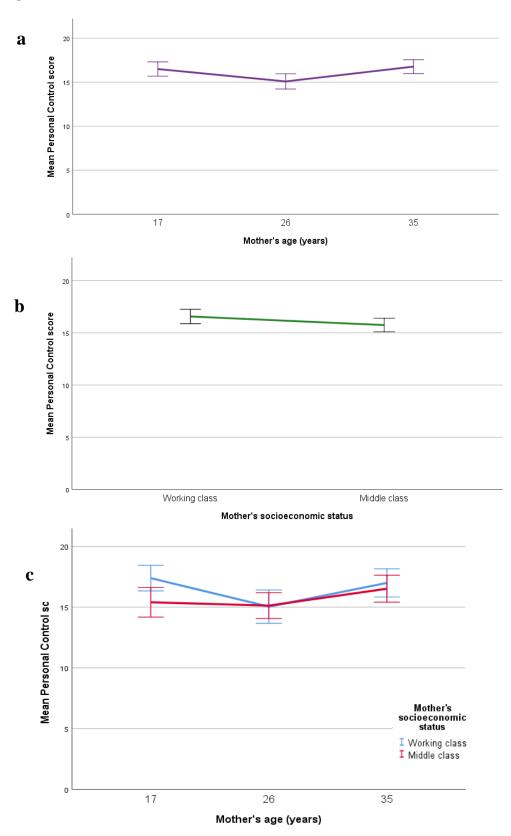
and youngest mothers as having a higher degree of personal control than when the mother was 26 years of age.

Table 3.7 Descriptive statistics for the personal control subscale per age, social class, and vignette

	N (%)	Mean (SD)	Median	Min	Max	Skewness	Kurtosis
Age of mother							
17 years	93 (33.8)	16.49 (3.93)	17.00	8	26	.07	28
26 years	81 (29.5)	15.09 (3.91)	15.00	3	24	37	.45
35 years	101 (36.7)	16.77 (4.01)	17.00	8	26	.04	48
SES							
Working class	147 (53.5)	14.61 (4.34)	17.00	3	26	24	.13
Middle class	128 (46.5)	14.44 (4.51)	16.00	8	26	.15	25
Vignette version							
1 (17y, MC)	42 (15.3)	15.40 (3.91)	15.50	8	24	.14	36
2 (17y, WC)	51 (18.5)	17.39 (3.74)	17.00	9	26	.10	14
3 (25y, MC)	38 (13.8)	15.13 (3.24)	15.00	8	21	24	25
4 (25y, WC)	43 (15.6)	15.05 (4.45)	15.00	3	24	39	.35
5 (34y, MC)	48 (17.5)	16.52 (3.82)	16.00	9	25	40	40
6 (34y, WC)	53 (19.3)	17.00 (4.20)	17.00	8	25	45	45

Figure 3.4

Mean personal control subscale scores



Mean personal control subscale scores for a) age of mother in vignette seen, b) SES of mother in vignette seen, and c) combination of age and SES of mother in vignette seen (i.e. vignette version).

Error bars: 95% confidence interval.

External Control

Descriptive statistics for the external control subscale within each group according to the age of the mother in the vignette viewed, social class of the mother, and the six vignette versions are presented in Table 3.8 and visualised in Figure 3.5. Mean external subscale scores were highest when the mother presented in the vignette was 35 years of age and lowest when the mother was 26 years old but did not vary greatly (Figure 3.5a). Similarly, scores were slightly higher when the mother was presented as middle class compared to working class, but again this difference was not large (Figure 3.5b). In contrast to this latter observation, within the group presented with the 35-year-old mother, there appeared to be a difference according to the mother's SES. In this group, external control rated higher when the mother was middle class compared to working class, indicating a possible interaction effect between age and SES (Figure 3.5c).

This was confirmed by a 2x3 ANOVA which found no significant main effect of age, F(2,269) = 1.18, p = .309, $p_{adj} = .324$, or SES, F(1,269) = 0.98, p = .324, $p_{adj} = .324$, on external control scores, but did find a significant interactive effect of age and SES, F(2,269) = 4.98, p = .008, $p_{adj} = .024$ (Figure 3.5). Consequently, this indicates that in combination the mother's age and SES had an influence on ratings of external control, although neither had a significant effect alone. This interaction appeared to be driven by the difference in the effect of SES within the group seeing the 35-year-old mother. This was confirmed using a simple main effects analysis, which found that external control scores for the 35-year-old working class mother were significantly lower than those of 35-year-old middle-class mother, F(1, 269) = 10.39, p = .001, $p_{adj} = .003$ (Figure 3.5c). This remained significant when corrected for multiple comparisons. No significant effect of SES was found for the external control scores for either the 17-year-old mother, F(1, 269) = 0.85, p = .357, $p_{adj} = .536$, or the 26-year-old mother, F(1, 269) = 0.16, p = .687, $p_{adj} = .687$. Therefore, this suggests that, for the

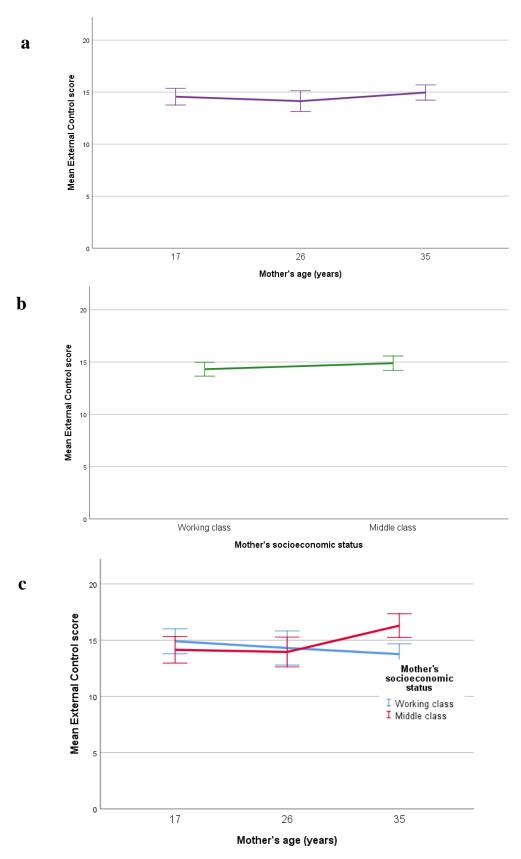
35-year-old mothers only, the situation for the middle-class mother was seen as under higher external control than for the working-class mother, whilst no similar class differences were clear within the other groups.

Table 3.8Descriptive statistics for the external control subscale per age, social class, and vignette

	N (%)	Mean (SD)	Median	Min	Max	Skewness	Kurtosis
Age of mother							
17 years	93 (33.8)	14.56 (3.87)	15.00	3	24	17	.35
26 years	81 (29.5)	14.14 (4.51)	14.00	3	26	10	.48
35 years	101 (36.7)	14.96 (3.70)	15.00	5	24	12	.43
SES							
Working class	147 (53.5)	14.31 (4.06)	14.00	3	24	22	.57
Middle class	128 (46.5)	14.89 (3.94)	15.00	3	26	08	.36
Vignette version							
1 (17y, MC)	42 (15.3)	14.14 (3.80)	15.00	3	21	69	.68
2 (17y, WC)	51 (18.5)	14.90 (3.93)	13.00	7	24	.19	04
3 (26y, MC)	38 (13.8)	13.95 (4.03)	14.00	7	25	.74	1.13
5 (35y, MC)	48 (17.5)	16.29 (3.66)	16.00	6	24	24	.45
6 (35y, WC)	53 (19.3)	13.75 (3.35)	15.00	5	23	26	.93

Figure 3.5

Mean external control subscale scores



Mean external control subscale scores for a) age of mother in vignette seen, b) SES of mother in vignette seen, and c) combination of age and SES of mother in vignette seen (i.e. vignette version).

Error bars: 95% confidence interval.

Stability

Descriptive statistics for the stability subscale within each group divided by age and SES of the mother in the vignette viewed and the six vignette versions are presented in Table 3.9 and visualised in Figure 3.6. Mean scores were similar for all groups, indicating a lack of influence of age and SES, either alone or in combination, on stability subscale scores. This was confirmed using a 2x3 ANOVA which found no significant main effect of age, F (2, 269) = 0.136, p = .873, p_{adj} = .985, or SES, F (1, 269) = 0.00, p = .985, p_{adj} = .985, nor any interaction effect between SES and age on stability scores, F (2, 269) = 0.183, p = .833, p_{adj} = .985.

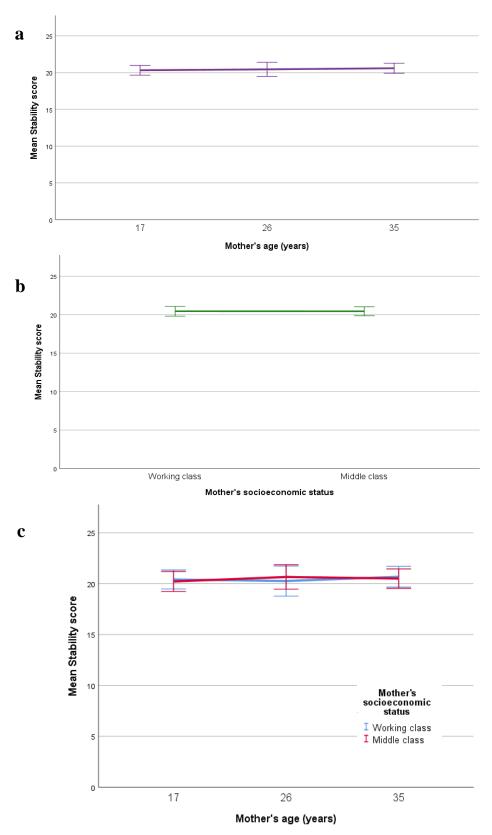
Table 3.9

Descriptive statistics for the stability subscale per age, social class, and vignette

	N (%)	Mean (SD)	Median	Min	Max	Skewness	Kurtosis
Age of mother							
17 years	93 (33.8)	20.32 (3.24)	20.00	12	27	.05	18
26 years	81 (29.5)	20.44 (4.29)	21.00	3	27	-1.48	4.37
35 years	101 (36.7)	20.59 (3.47)	21.00	12	27	40	14
SES							
WC	147 (53.5)	20.46 (3.91)	21.00	3	27	-1.09	3.19
MC	128 (46.5)	20.45 (3.34)	20.00	3	27	25	.35
Vignette version							
1 (17y, MC)	42 (15.3)	20.21 (3.17)	20.00	15	27	.62	04
2 (17y, WC)	51 (18.5)	20.41 (3.32)	20.00	12	27	35	08
3 (26y, MC)	38 (13.8)	20.66 (3.66)	21.00	10	27	90	1.73
4 (26y, WC)	43 (15.6)	20.26 (4.81)	20.00	3	27	-1.65	4.74
5 (35y, MC)	48 (17.5)	20.50 (3.28)	21.00	13	27	30	31
6 (35y, WC)	53 (19.3)	20.68 (3.67)	21.00	12	27	48	.00

Figure 3.6

Mean stability subscale scores



Mean stability subscale scores for a) age of mother in vignette seen, b) SES of mother in vignette seen, and c) combination of age and SES of mother in vignette seen (i.e. vignette version).

Error bars: 95% confidence interval.

Judgements and Decision-Making Regarding Welfare and Parenting Capacity

Three 2 x 3 factorial ANOVAs were conducted to assess for main and interactive effects of age and social class of the mother presented in the vignette on these judgements: one for each of ratings concerning welfare and parenting capacity. As for the CDS-II subscales, assumptions upon which ANOVA is based were first checked, using both histograms and Shapiro-Wilk tests and considering values of skew and kurtosis to ascertain whether data for each group approximated the normal distribution and showed equality of variances, respectively. This confirmed that there was no significant deviation from normality within any of the sample groups (per vignette version, per age or per SES). Levene's tests demonstrated adequate equality of variance for all ANOVAs.

Ratings of Extent of Concern for Mother's Welfare

Descriptive statistics for the ratings of the extent of concern for the mother's welfare according to the age and social class of the mother and the six vignette versions are presented in Table 3.10 and visualised graphically in Figure 3.7.

These indicate that ratings of concern for the welfare of the mother were highest for the youngest mother and lowest for the oldest, with an apparent linear decrease as age increased (Figure 3.7a). Consistent with this observation, a significant main effect of age on ratings of concern about the mother's welfare was confirmed using a 2 x 3 ANOVA, F (2, 269) = 3.46, p = .033, p_{adj} = .0495. Post-hoc t-tests were conducted to investigate this main effect of age. Ratings of concern for the 17-year-old mother were found to be significantly higher than those for the 35-year-old mother, t (192) = 2.71, p = .007, p_{adj} = .021. No significant difference was found between the ratings of concern for the 26-year-old mother's welfare and those of either the 17-year-old mother, t (172) = 1.53, p = .127, p_{adj} = .191 or the 35-year-old mother, t (180) = 0.961, p = .338, p_{adj} = .338 (Figure 3.7a). Therefore, while a

significant difference was found between ratings of concern for the oldest and youngest mother, ratings of concern for the 26-year-old mother fell in between these and therefore did not differ significantly from either.

SES also appeared to influence ratings of concern for the mother's welfare: mean ratings indicated higher concern when the mother presented was working class than when she was middle class (Table 3.10, Figure 3.7b). This was confirmed by the 2 x 3 ANOVA which found a significant main effect of SES on these ratings, F(1, 269) = 12.88, p < 0.001, $p_{adj} = .002$.

Ratings of concern for the mother for each of vignette version also showed these main effects of age and SES but did not suggest an interaction effect between the factors (Figure 3.7c), and the ANOVA found no such significant interaction effect, F(2, 269) = 1.80, p = .168, $p_{adj} = .168$.

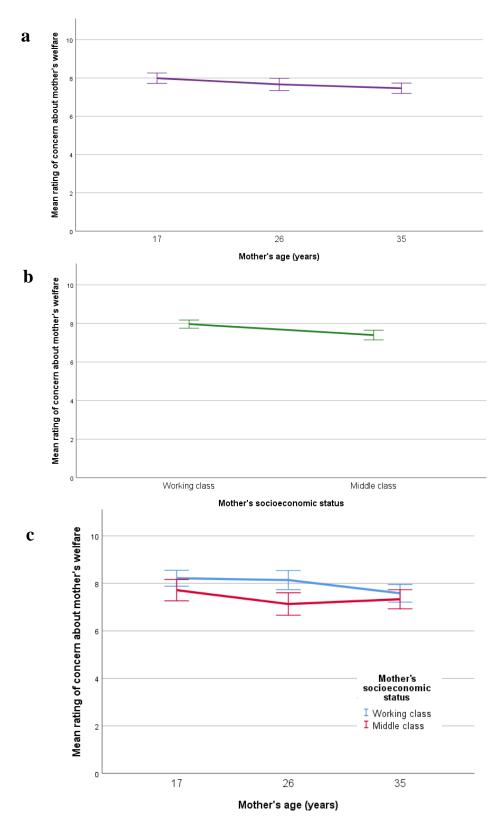
Table 3.10

Descriptive statistics for ratings of extent of concern for mother's welfare by age and social class of mother and vignette version

	N (%)	Mean (SD)	Median	Min	Max	Skewness	Kurtosis
Age of mother							
17 years	93 (33.8)	7.99 (1.32)	8.00	5	10	18	54
26 years	81 (29.5)	7.67 (1.45)	8.00	4	10	.03	59
35 years	101 (36.7)	7.47 (1.37)	7.00	3	10	34	.59
SES							
Working class	147 (53.5)	7.97 (1.31)	8.00	3	10	11	49
Middle class	128 (46.5)	7.40 (1.43)	7.00	3	10	16	.05
Vignette version							
1 (17y, MC)	42 (15.3)	7.71 (1.44)	8.00	5	10	.01	53
2 (17y, WC)	51 (18.5)	8.22 (1.19)	8.00	6	10	21	66
3 (26y, MC)	38 (13.8)	7.13 (1.44)	7.00	4	10	.16	39
4 (26y, WC)	43 (15.6)	8.14 (1.30)	8.00	6	10	.14	-1.08
5 (35y, MC)	48 (17.5)	7.33 (1.39)	7.00	3	10	63	1.27
6 (35y, WC)	53 (19.3)	7.58 (1.35)	8.00	4	10	07	13

Figure 3.7

Mean rating of extent of concern for mother's welfare



Mean rating of extent of concern for mother's welfare for a) age of mother in vignette seen, b) SES of mother in vignette seen, and c) combination of age and SES of mother in vignette seen (i.e. vignette version).

Error bars: 95% confidence interval.

Ratings of Extent of Concern for Child's Welfare

Descriptive statistics for ratings of the extent of concern for the child's welfare according to the age and social class of the mother and the six vignette versions are presented in Table 3.11. Mean ratings of concern were, again, highest when the mother presented was youngest, but this difference was not as large and did not follow the same linear reduction with decreasing age as ratings of concern for the mother: ratings of concern of the child of the 35-year-old mother were marginally higher than those of the 26-year-old mother (Figure 3.8a, Table 3.11). Moreover, no significant main effect of age was found by the 2 x 3 ANOVA, indicating that the mother's age in the vignette did not significantly affect the ratings of concern for the child's welfare.

Conversely, a larger difference was seen in mean ratings of concern for the child according to SES (Table 3.11), and a significant main effect of SES was identified, F(1, 269) = 7.63, p = .006, $p_{adj} = .018$. Specifically, concern for children whose mothers who were working class was rated significantly higher than concern for children whose parents were middle class (Figure 3.8b). No interaction between age and social class on judgements of extent of concern for the child was found, F(2, 269) = 0.175, p = .840, $p_{adj} = .840$ (Figure 3.8c).

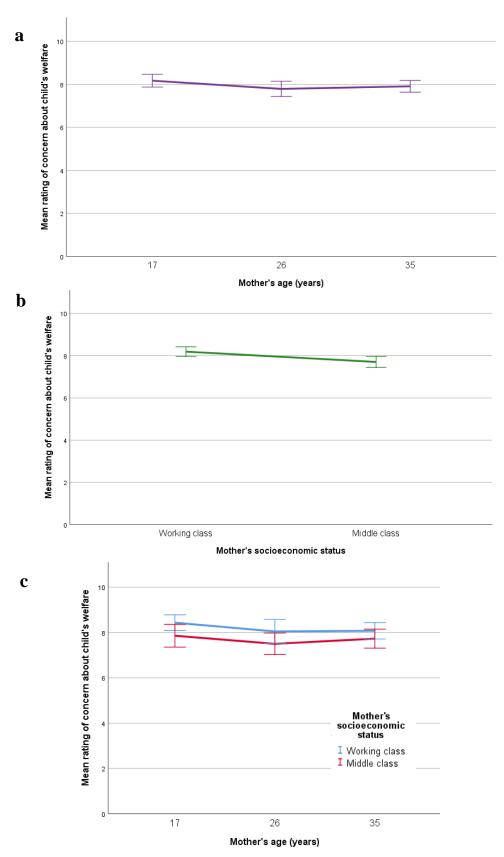
Table 3.11

Descriptive statistics for ratings of extent of concern for child's welfare by age and social class of mother and vignette version.

	N (%)	Mean (SD)	Median	Min	Max	Skewness	Kurtosis
Age of mother							
17 years	93 (33.8)	8.17 (1.44)	8.00	4	10	53	15
26 years	81 (29.5)	7.79 (1.61)	8.00	3	10	55	.33
35 years	101 (36.7)	7.91 (1.38)	8.00	3	10	75	1.08
SES							
Working class	147 (53.5)	8.19 (1.42)	8.00	3	10	74	.59
Middle class	128 (46.5)	7.70 (1.50)	8.00	3	10	49	.45
Vignette version							
1 (17y, MC)	42 (15.3)	7.86 (1.62)	8.00	4	10	41	32
2 (17y, WC)	51 (18.5)	8.43 (1.24)	9.00	6	10	36	80
3 (26y, MC)	38 (13.8)	7.50 (1.45)	7.00	3	10	62	1.12
4 (26y, WC)	43 (15.6)	8.05 (1.72)	8.00	3	10	70	.23
5 (35y, MC)	48 (17.5)	7.73 (1.44)	8.00	3	10	62	1.27
6 (35y, WC)	53 (19.3)	8.08 (1.31)	8.00	4	10	89	1.15

Figure 3.8

Mean rating of extent of concern for child's welfare



Mean rating of extent of concern for child's welfare for a) age of mother in vignette seen, b) SES of mother in vignette seen, and c) combination of age and SES of mother in vignette seen (i.e. vignette version).

Error bars: 95% confidence interval.

Ratings of Parenting Capacity

Descriptive statistics for the ratings of parenting capacity according to the age and SES of the mother and the six vignette versions are presented in Table 3.12. These suggest an influence of age on impressions of parenting capacity: the mean rated parenting capacity of the 17-year-old mother was markedly lower than that of either the 26- or 35-year-old mother, while mean ratings of parenting capacity were similar for the older mothers (Figure 3.9a). This effect of age was confirmed using a 2 x 3 ANOVA, which found that there was a significant main effect of age on impressions of parenting capacity, F (2, 269) = 5.77, p = .004, p_{adj} = .012. Post-hoc t-tests further revealed that parenting capacity was rated significantly lower (mean = 3.95) for 17-year old mothers, compared to both 26-year-old (mean =), t (152.456) = -2.78, p = 0.006, p_{adj} = .009, and 35-year-old (mean =) mothers, t (192) = -3.26, p = 0.001, p_{adj} = .003, which remained significant following FDR correction. No significant difference was found between impressions of parenting capacity for 26- and 35-year-old mothers, t (180) = -0.149, p = .882, p_{adj} = .882 (Figure 3.9a).

Descriptive statistics and graphical representation of the means also suggested that SES may have some influence on impressions of parenting capacity with mean ratings lower when the mothers were presented as working class compared to middle class (Table 3.12, Figure 3.9b). However, when explored in the 2x3 ANOVA, no significant main effect of SES was identified, indicating that ratings were not significantly lower for the working-class mother than those for the middle-class mother, finding only a non-significant trend in this direction at the uncorrected level, F(1, 269) = 3.36, p = .068, $p_{adj} = .102$.

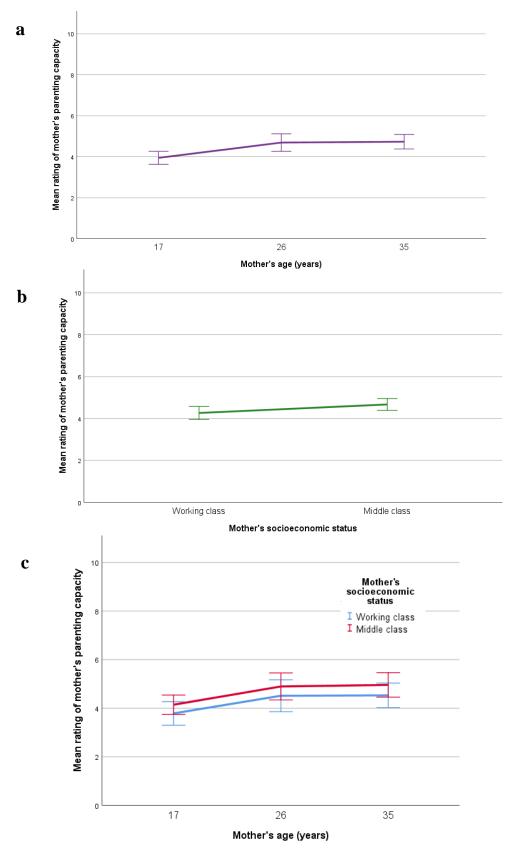
No significant interaction effect between age and SES on ratings of parenting capacity was identified, F(2, 269) = 0.01, p = .990, $p_{adj} = .990$ (Figure 3.9c).

Table 3.12

Descriptive statistics for ratings parenting capacity by age and social class of mother and vignette version.

	N (%)	Mean (SD)	Median	Min	Max	Skewness	Kurtosis
Age of mother							
17 years	93 (33.8)	3.95 (1.54)	4.00	0	8	02	.05
26 years	81 (29.5)	4.69 (1.93)	5.00	1	10	.37	09
35 years	101 (36.7)	4.73 (1.79)	5.00	1	9	.20	.03
SES							
Working class	147 (53.5)	4.27 (1.91)	4.00	0	10	.51	.44
Middle class	128 (46.5)	4.67 (1.62)	5.00	1	9	.08	34
Vignette version							
1 (17y, MC)	42 (15.3)	4.14 (1.28)	5.00	1	7	57	05
2 (17y, WC)	51 (18.5)	3.78 (1.72)	4.00	0	8	.30	.07
3 (26y, MC)	38 (13.8)	4.89 (1.69)	5.00	2	8	00	-1.05
4 (26y, WC)	43 (15.6)	4.51 (2.13)	5.00	1	10	.65	.37
5 (35y, MC)	48 (17.5)	4.96 (1.74)	5.00	2	9	.02	35
6 (35y, WC)	53 (19.3)	4.53 (1.84)	5.00	1	9	.39	.58

Figure 3.9 *Mean rating of impression of parenting capacity*



Mean rating of impression of parenting capacity for a) age of mother in vignette seen, b) SES of mother in vignette seen, and c) combination of age and SES of mother in vignette seen (i.e. vignette version).

Error bars: 95% confidence interval.

Exploratory Analyses of Relationships between Attributions and Judgements

Associations between the attribution and judgement ratings were assessed using correlational analyses (two-tailed). These are shown in Table 3.13, with an FDR adjusted *p*-value reported to correct for multiple analyses.

Table 3.13

Correlations between CDS-II subscale scores and ratings of welfare and parenting capacity

-	Personal	External	Stability	Concern for	Concern for	Parenting
	control	control		mother's	child's	capacity
				welfare	welfare	rating
Locus of	r = .281***	r =190**	r = .196**	r =191**	r =199**	r = .308***
causality	P < .001	P = .002	P = .001	P = .001	P = .001	P < .001
	$p_{adj} < .001$	$p_{adj}=.004$	$p_{adj} = .002$	$p_{adj}=.002$	$p_{adj} = .002$	p_{adj} < .001
Personal		r =015	r = .254***	r = .109	r = .130*	r =134*
control		P = .807	P < .001	P = .072	P = .031	P = .026
		$p_{adj} = .807$	$p_{adj} < 0.001$	$p_{adj} = .098$	$p_{adj} = .049$	$p_{adj} = .044$
External			r = .063	r =032	r =089	r =037
control			P = .297	P = .602	P = .141	P = .547
			$p_{adj} = .332$	$p_{adj}=.602$	$p_{adj} = .167$	$p_{adj} = .577$
Stability				r =198**	r =104	r = .117
				P = .001	P = .085	P = .053
				$p_{adj} = .002$	$p_{adj} = .107$	$p_{adj} = .077$
Concern					r = .630***	r = -
for child's					P < .001	.287***
welfare					$p_{adj} < .001$	P < .001
						$p_{adj} < .001$
Concern						r = -
for						.367***
mother's						P < .001
welfare						$p_{adj} < .001$

^{*}Significant at the p < .05 level after FDR correction

^{**} Significant at the p < .01 level after FDR correction

^{***} Significant at the p < .001 level after FDR correction

As might be expected, locus of causality subscale scores correlated positively with personal control and negatively with external control, meaning that locus of causality further towards the person was associated with higher personal control ratings, while the more locus of control vied towards the situation the greater the association was with higher external control. Personal control and external control were also negatively correlated, but this effect was very small and non-significant, indicating that they are not simply opposite ends of the same construct. Stability was significantly correlated positively with locus of causality and personal control, indicating that, when the situation was viewed as more stable/unchangeable, this was associated with attributing the cause as being within the mother (as opposed to within the situation) and with the mother having greater control over the situation, respectively. This fits with Ewart and Pennington's (1987) definition of the components comprising personal responsibility.

The explicit judgements all showed significant intercorrelation. The positive correlation between ratings of concern for the mother's welfare and ratings of concern for the child's welfare was strong and indicated that higher concern for one was also associated with higher concern for the other. Parenting capacity was significantly and negatively correlated with both concern for the welfare of the child and mother, indicating that higher ratings of concern were associated with lower ratings of capacity.

More interesting to the study were the associations between the attribution scales and the judgement ratings, since the causal attribution theory and hypothesis would suggest that judgements should be mediated by the attributions. Locus of causality scores showed a significant positive correlation with ratings of concern for both the mother and the child's welfare, indicating that higher concern was associated with the locus of causality being understood as more within the mother than the situation for both. Locus of causality and parenting capacity ratings showed a negative correlation, indicating that capacity ratings

decreased with increasing attribution of the locus of causality to within person factors, while locus of causality rated as more within the situation was associated with higher ratings of parenting capacity.

The personal control subscale scores showed a significant positive correlation with concern for the child's welfare and a significant negative correlation with parenting capacity, indicating that higher ratings of the mother's control over the situation were associated with increased concern for the child's welfare and lower ratings of parenting capacity. No significant relationship was found between personal control subscale scores and concern for the mother.

This is in direct contrast to the stability subscale for which the only significant relationship found was a negative correlation with ratings of the extent of concern for the mother. This suggests that increased concern for the mother was associated with an attribution of lesser stability or increased changeability. However, no such association was found with concern for the child or parenting capacity.

No significant associations were found between the external control subscale score and any of the judgement ratings, suggesting no relationship between the extent to which participants perceived that others had control over the situation and concern for either mother, child or parenting capacity.

The hypothesis suggested that the attributions should play a mediating role in the judgement outcomes. However, for attribution scores to be a mediatory factor in the relationship between mother's age and SES and ratings of concern and parenting capacity, it would be necessary for there to be an association between mother's age and SES and attribution scores and between attribution scores and ratings of concern and parenting capacity in addition to the direct relationship between mother's age and SES and these ratings (Hayes, 2017; de Nooy, 2020). As the analyses reported earlier in this chapter indicated, the

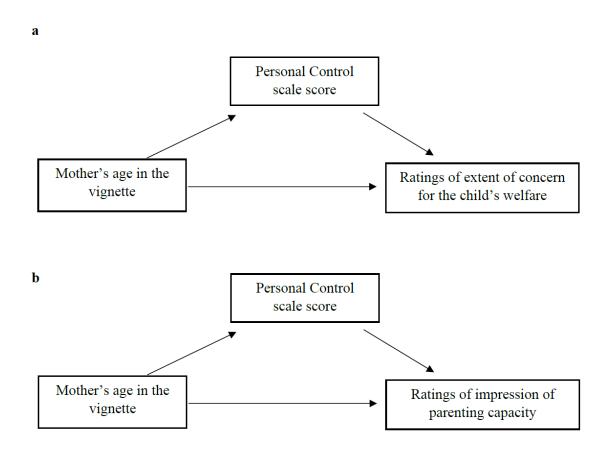
only significant effects of age or SES on attribution scale scores were a main effect of age on personal control and an interactive effect of age and SES on external control. Conversely, locus of control was the only attribution with a significant association with all ratings of concern and parenting capacity factors. Personal control was only associated with extent of concern for the child and parenting capacity, while stability was associated only with extent of concern for the mother and external control with none of these ratings. For direct effects, main effects of mother's age and SES were found on ratings of concern for the child, while only a main effect of mother's age on ratings of parenting capacity and of mother's SES on concern for the child's welfare were found.

Therefore, the only associations which met the criteria for mediatory pathways was the relationship between mother's age and ratings of concern for the child and parenting capacity, with personal control as a potential mediating factor. These potentially mediated pathways are represented in Figure 3.10 and were evaluated using the PROCESS (Version 3; Hayes, 2017). However, this indicated no significant evidence of a mediatory effect, with all 95% confidence intervals for the estimates of the indirect relationship inclusive of zero.

Therefore, this suggests that causal attributions as measured by the attribution subscales did not play a mediating role in the relationship between mother's age or SES in the vignette and the judgement ratings about the extent of concern for the welfare of the mother or the child or impressions of parenting capacity.

Figure 3.10

Representation of hypothesised pathways mediated by causal attributions



Analyses of Open-Ended Questions

Causes or factors influencing the situation

Responses to question "What causes or factors do you think are most likely to have influenced the situation described?" varied in detail and length, ranging from just one word ("neglect") to 187 words, with a mean length of 36.08 words and a median length of 26 words.

Through several iterations of code development, fourteen categories were constructed which encompassed the variety of responses given. These are shown in Table 3.17 alongside the number of participants who provided responses within each category. Many responses included more than one category: the mean number of codes endorsed per participant was 3.49 (median 3.00), with a minimum of one and a maximum of eleven. However, the maximum is increased by just two participants who suggested more than 7 causes.

The most common type of causes or factors influencing the situation were encompassed by the category "maternal mental health or wellbeing", with 90.55% of the sample providing such a response. This code included any answer which directly referenced mental health or wellbeing influences, including where this was cited as the primary cause for a secondary factor such as reduced interaction or ability to meet basic needs or be responsive to the child's needs.

This was followed by two more situational factors: limited family or social support, which was provided as a likely factor by 53.09% of participants and encompassed both social and family support as well as loneliness and isolation; and social capital influences (e.g. poverty, finance, housing, economic opportunity), which was cited by 40.36% of respondents. It is of note that the percentage of participants endorsing factors encompassed by both of these codes may likely to be even higher since it is likely that at least some of the

Table 3.17

Categories developed from coding open-ended responses about causes or influential factors

Category	Codes encompassed by final category	Number of participants (%)
Mother's age (without elaboration about effect on situation)	Mother's age; teen mum; young mum; mum at 15; (without elaboration as to effect of age on situation)	33 (12.00%)
Stress/competing demands impacting on availability	Competing demands (e.g. work/study and motherhood); stress; stress of parenting young child; motherhood is exhausting; long hours/stressful job; attachment issues due to childcare use	58 (21.09%)
Maternal mental health/wellbeing	Maternal mental health/wellbeing; lack of interaction/stimulation/inconsistent responsivity due to mothers mental health; maternal emotional capacity; low mood; mum's disordered eating due to mental health; depression; post-natal depression; unable to meet child's basic needs because of depression/mental health; low self-esteem; low self-confidence; maternal mental health affecting attachment	249 (90.55%)
Developmental delay or disorder/health issues/additional needs in the child	Developmental delay; additional needs in child; concerns and worries about child's development affecting mum's mental health; medical reason for low weight; child hearing loss; unidentified child health need; feeding issues/intolerances; prematurity/low birth weight; ;earning disability in child; possible Autism Spectrum Disorder; developmental disorder/disability; physical health problems in child; vitamin deficiencies in child; physical birth trauma affecting development	102 (37.09%)
Mother's history	Mother's history of abuse or trauma; mother's attachment and attachment style; mother's own experiences of being parented; unwanted pregnancy/circumstances of conception; relationship breakdown	41 (14.91%)
Social capital	Poor housing/housing concerns/insecure housing; low SES; poverty; lack of adequate nutrition because of money; poor parental education with link to lack of life	111 (40.36%)

	opportunities; lack of parental aspirations; unemployed; lack of social capital	
Single mother (without further elaboration as to impact/effect on situation)	Single mother (without further elaboration as to impact/effect on situation)	27 (9.82%)
Safeguarding concerns	Safeguarding concerns; needs child services intervention; neglect; substance/alcohol abuse; Emma abusing Megan; abuse by other; domestic violence; abusive relationship with other; domestic abuse toward mother; setting or person used for childcare may be neglectful/abusive	47 (17.09%)
Limited family/social support/inadequate appropriate social support	Social isolation; limited family support; lack of social network or support; peers at different life stage; loneliness; difficult relationship with or lack of support from father or others	146 (53.09%)
Lack of access to services	Not enough professional input available; service cuts; limited access to services/support/input/ advice; lack of knowledge about where to get support or support available; lack of access to good childcare	17 (6.18%)
Inadequate parenting capacity/knowledge	Lack of parenting experience; lack of knowledge of child development and needs; inadequate parenting skills; lack of affection toward child; inadequate diet/nutrition because of lack of knowledge; lack of adequate stimulation or interaction due to mother's lack of ability or knowledge; inconsistent parenting/interaction/ response	61 (22.18%)
Factors about the assessment/of no particular concern	About the situation of assessment - concerns of judgement/anxiety/odd for child/child tired or ill at time of assessment - affecting presentation of both child and mother; child just small/genetics; child just picky eater	10 (3.64%)
Stigma or fear of judgement as barriers to seeking help	Mother's fear of judgement/losing child preventing help-seeking; difficulty or anxieties about seeking help; social/cultural roles/expectations; mother taking too much on to prove is good enough mother; stigma of single parenthood	13 (4.73%)
Attachment issues of unspecified cause	Attachment issues; bonding issues [of unspecified cause]	46 (16.73%)

9.82% who responded giving single motherhood or the 12.00% who stated age as a factor may have intended this to indicate either limited support or other social factors included in the social capital category. However, where single motherhood or age was cited without further elaboration as to how this may impact on the situation via these other causes, this was coded as a category on its own. Where these (or other) factors were clearly linked as the route by which single parenthood or age had a likely influence, the answer was instead categorised according to the more direct cause upon which single motherhood or age was influential.

The next most common category encompassed developmental disorder or additional needs or health issues relating to the child (37.09%). This included any factors including concerns or suggestions of additional medical or health needs, feeding issues or intolerances, cognitive or neurodevelopmental delay or disorder or genetic disorders. It also included answers where these issues were clearly identified as a possible cause for maternal worry or concern and thus being a primary factor impacting on mother's wellbeing. It is interesting that the percentage of answers which included this category was less than half that of participants citing concerns about the mother's mental health as influencing the situation. This suggests that, although many answers endorsed both categories, a greater proportion of participants focused on the mother's mental health as a causal factor influencing development than suggested the possibility of influence in the other direction.

Inadequate parenting capacity or knowledge was identified as an influential factor by 22.18% of the sample, indicating that more than one fifth of participants thought that poor parenting skills or ability and inadequate understanding or knowledge of the child's needs was likely to be implicated in the situation described in the vignette. This would appear to represent a cause located within the mother. This category was separate from safeguarding concerns, which included unspecified but identified safeguarding concerns or need for intervention, or specifically cited concerns cited such as neglect or abuse. These were cited

by 17.09% of the sample. A similar proportion (21.09%) of the sample identified stress or competing demands, such as managing or juggling work or study or the stress inherent in motherhood. This latter category indicates influences more located in factors of the situation than the mother.

The mother's history was identified as having potential influence in 14.91% of answers. This category included the mother's own childhood history and experience of being parented, as well as the circumstances of the pregnancy and the presence of relationship breakdown. These appeared to be situational factors, which may impact on either the style of parenting or parenting knowledge or on mental health or even support. However, separating the intended downstream effects within each answer was not possible unless directly stated and, therefore, was coded separately. Similarly, several participants (16.73%) cited attachment issues as a factor without stating any cause for the attachment difficulty (e.g. additional needs of the child, mental health of the mother, stress, history, etc.) and, consequently, when this was provided without a specified cause, it was coded alone to preserve this information and avoid making assumptions about the influential causes intended participants.

'Lack of access to services' (6.18%) and 'Stigma or fear of judgement as barriers to seeking help' (4.73%) were not commonly cited, but both encompassed difficulties accessing help for the problems described in the vignette. They were coded separately as the factors behind difficulties accessing support were clearly separable between inadequate service availability and reluctance to access services because of stigma or judgement and fear of personal consequences or unfair treatment.

Finally, some answers highlighted factors that may have been present and spuriously caused concern, whilst actually within normal limits or even occurring as a result of the review conditions itself. These were varied, but included anxiety at the review affecting

behaviour (e.g. either the mother being concerned about being judged or the child being wary of a stranger) and the child just being of small build or a 'picky' eater but not malnourished.

Influence of mother's age and/or social class on causes or factors identified as influencing the situation. A more interesting question for exploration in the context of this study was whether the causes or influencing factors suggested varied according to the age and/or social class of the mother presented in the vignette. Since the number of participants who viewed each vignette was unequal, the percentage of the group who identified a cause or influencing factor within each category was calculated. These percentages are shown in Table 3.18, alongside a summary of whether associations with maternal age or SES, independently and interactionally, were found for each of the categories. For several categories, it was not possible to statistically consider either main or interaction effects between maternal age and SES and whether that category of influential factors was cited since assumptions were not met for chi-square or loglinear analysis, with greater than 20% of cells having expected cell counts below five. Categories for which a significant association between the age and/or SES of the mother, either alone or in combination, and the proportion of participants citing that factor are described in detail below. Where no such associations were found the categories and analyses are not further described, but can be found in detail in Appendix G.

 Table 3.18

 Percentage of participants endorsing each category of causal or influential factors according to characteristics of the mother

Category	M	lother's a	ige	Mothe	r's SES		Vignette seen					Significant association?*		
	17 years	26 years	35 years	WC	MC	17y, MC	17y, WC	26y, MC	26y, WC	35y, MC	35y, WC	Age	SES	Age x SES
Mother's age	34.41%	0.00%	0.99%	12.93%	10.94%	33.33%	35.29%	0.00%	0.00%	0.00%	1.89%	✓	X	X
Stress/competing demands impacting on availability	21.51%	16.05%	24.75%	6.80 %	37.50%	40.48%	5.88%	26.32%	6.98%	43.75%	7.55%	X	✓	X
Maternal mental health/wellbeing	84.95%	91.36%	95.05%	95.52%	88.28%	80.95%	88.24%	86.84%	95.35%	95.83%	94.34%	X	X	-
Additional developmental/health issues in the child	31.18%	37.04%	42.57%	32.65%	42.19%	30.95%	31.37%	42.11%	32.56%	52.08%	33.96%	X	X	X
Mother's history	20.43%	12.35%	11.88%	14.29%	15.63%	19.05%	21.57%	13.16%	11.63%	14.58%	9.43%	X	X	X
Social capital	46.24%	37.04%	37.62%	55.10%	23.44%	38.10%	52.94%	23.68%	48.84%	10.42%	62.26%	X	✓	✓
Single mother	15.05%	4.94%	8.91%	10.20%	9.38 %	14.29%	15.69%	2.63%	6.98%	10.42%	7.55%	X	X	-
Safeguarding concerns	15.05%	13.58%	21.78%	19.05%	14.80%	11.90%	17.65%	13.16%	13.95%	18.75%	24.53%	X	X	X
Limited family/social support	65.59%	48.15%	45.54%	55.10%	50.78%	66.67%	64.71%	57.89%	39.53%	31.25%	58.49%	✓	X	✓
Lack of access to services	4.30%	7.41%	6.93%	6.12%	6.25%	2.38%	5.88%	13.16%	2.33%	4.17%	9.43%	X	X	-
Inadequate parenting capacity/knowledge	31.18%	19.75%	15.84%	24.49%	19.53%	28.57%	33.33%	21.05%	18.60%	10.42%	20.75%	✓	X	X

Table 3.19 (cont'd.)

Category	M	other's a	ge	Mothe	Mother's SES Vignette seen			nette seen			Significant association?*			
	17 years	26 years	35 years	WC	MC	17y, MC	17y, WC	26y, MC	26y, WC	35y, MC	35y, WC	Age	SES	Age x SES
Factors about the assessment/of no particular concern	2.15%	4.94%	3.96%	4.08%	3.13%	4.76%	0.00%	2.63%	6.98%	2.08%	5.66%	X	-	-
Stigma or fear of judgement as barriers to seeking help	5.48%	2.47%	5.94%	4.76%	4.69%	7.14%	3.92%	2.63%	2.33%	4.17%	7.55%	X	X	-
Attachment issues of unspecified cause	19.35%	16.05%	14.8%	17.01%	16.41%	14.29%	23.53%	15.79%	16.28%	18.75%	11.32%	X	X	X

WC: working class; MC: middle class; y: years; ✓: association found; X: association not found; -: did not meet test assumptions for analysis.

^{*} Significant at the p < .05 level

Mother's age category. Most notably, and perhaps unsurprisingly, mother's age was considerably and more commonly listed as a factor by the group that saw the 17-year-old mother in the vignette (34.41%) than by those presented with 26-year-old (0%) or 35-year-old (0.99%) mothers. In contrast, the percentage of participants who cited mother's age as a cause was similar for those seeing the working class and the middle-class mother, suggesting no association with SES. Considering maternal age and SES in conjunction, the percentage of participants identifying this factor varied across the six vignette groups, with similar and considerably higher percentages within both 17-year-old mother vignette groups compared to all other age and SES combinations which were themselves similar and very low.

Consequently, this supports the finding of an influence of age but suggests no interaction effect between mother's SES and age in the vignette and whether mother's age was cited as an influential factor in participants' responses.

Loglinear analysis could not be employed to confirm the lack of interaction effects since the test assumptions were not met. However, given the data, it appears highly unlikely that this analysis would have revealed anything further of interest. It was, however, possible to consider further the differences between groups seeing mothers of different ages in the vignette using a chi-square analysis. This confirmed that the difference between the groups seeing the three different ages of the mother in the vignette was highly statistically significant with a large effect size ($\chi^2 = 66.86$, p < .0001, Cramer's V = .493). Post-hoc pairwise comparisons verified that those seeing the youngest mother were significantly more likely to cite this factor than those seeing either the 26- or 36-year-old mothers ($\chi^2(1) = 34.15$, p < .0001, and $\chi^2(1) = 38.30$, p < .0001, respectively), while this likelihood did not differ between groups seeing the older mothers ($\chi^2 = .80$, p = 1.0). This finding remains significant when corrected for multiple comparisons.

It is important to note that answers were only coded for age where this was listed as a factor without further elaboration, such as clarifying that this may mean less peer support as other women of a similar age were less likely to be mothers (which would instead have been coded under limited support) or that they were more likely to be in poverty (coded instead under social capital). It is possible that at least some respondents used this as shorthand for other codes, but nevertheless suggests that young parenthood, in itself, was viewed as an influential factor in the situation without further information provided.

Stress/competing demands impacting on availability. Stress and competing demands were most often provided as influential factors by those viewing the vignette in which the mother was oldest (by 24.75% of this group), with the group seeing the 26-year-old citing this least frequently (16.05% of this group) and those presented with the youngest mother in between (21.51%).

A larger difference was found for stress or competing demands according to the SES of the mother in the vignette seen. The percentage of participants reporting this factor when presented with the middle-class mother in the vignette was more than 30% higher and five and a half times that of those who saw a working-class mother (37.5% compared to 6.8%; odds ratio = 5.51). In fact, this was the category of influential factors for which the difference was largest between the groups seeing the different SES of the mother.

The percentages of participants citing factors encompassed by the stress/competing demands code across the six SES and age combinations reflected this main effect of SES. They also suggested a possible interaction effect whereby the percentages for the 26-year-old mother differed from the groups seeing older and younger mothers, but only when she was presented as middle class (26.32% compared to 40.48% and 43.75% for 17- and 35-year-old mothers, respectively).

However, this potential interaction was not confirmed by loglinear analysis, which identified a significant two-way model only. This found that the highest-order (three-way mother's SES x mother's age x whether or not stress/competing demands were cited as potential causes) interaction was not significant, $\chi^2(2) = 0.80$, p = .671, but did find that removing all two-way interactions would significantly affect the model, $\chi^2(5) = 43.427$, p < .0001. The likelihood ratio of this model was $\chi^2(8) = 5.54$, p = 69, and the model itself was found to have retained only one two-way interaction: between the mother's SES in the vignette and whether stress/competing demands were cited as influential factors (partial $\chi^2(1) = 41.201$, p < .0001). Mother's age was not significantly associated with this category (partial $\chi^2(1) = 2.396$, p = .302). The association with SES was highly significant and survives correction for multiple comparisons.

Therefore, this model indicates the presence of a significant and strong association between the SES of the mother seen in the vignette and whether answers about influential factors included causes within the stress/competing demands category. However, there was no such association found with the age of the mother in the vignette, either alone or in combination (interaction) with SES.

Social capital. Social capital factors were more commonly reported as a possible cause or influencing factor by participants who saw the vignette with the 17-year-old mother: the percentage of this group citing this factor (46.24%) was higher than in those seeing the 26- or 35-year-old mother, which were similar at 37.04% and 37.62%, respectively. However, the maximum difference is not especially great at 9.2%.

In contrast, a much larger difference was observed according to the SES of the mother presented in the vignette, with this category having the second largest group difference according to SES. Specifically, the percentage of participants identifying factors related to

social capital was markedly higher in the group who saw the working-class mother (55.10%). This was more than twice the proportion citing this influence among those who saw the middle-class mother (23.44%).

Percentages per vignette version for participants citing factors relating to social capital reflected this overall effect of SES. However, this effect became more pronounced when the mother was older, suggesting a further effect of age and SES in combination. For the youngest mothers, the difference was 14.8% with an odds ratio of 1.39. For participants who saw the 26-year-old mother in the vignette, this difference was greater at 25.16% and an odds ratio of 2.06. More markedly still, this difference increased further to 51.84% and an odds ratio of 5.98 between the SES groups for those seeing the oldest (36-year-old) mother in the vignette. Again, it is possible that the caveat regarding the use of a different SES proxy for the youngest mothers may be implicated in this finding, especially given that social capital factors would be expected to be directly associated with SES. However, this does not fully explain this interaction effect.

To assess the significance of this interaction pattern, a loglinear analysis was conducted. This analysis identified a significant three-way model which retained all effects (i.e. an interaction between mother's SES and age and whether or not factors related to lack of social capital were cited as potential causes). The likelihood ratio of this model was $\chi 2$ (0) = 0, p = 1. This analysis indicated that the highest-order interaction was significant, $\chi 2$ (2) = 9.85, p = .007. To explore this, separate chi-square analyses were conducted for each mother's age for the relationship between mother's SES and whether lack of social capital was cited as a factor. This showed that this finding was driven by a significant association between SES and citing lack of social capital as a factor among participants who saw either the 35-year-old mother in the vignette, $\chi 2$ (1) = 28.25, p < .0001, or the 26-year-old mother, $\chi 2$ (1) = 5.47, p = .023. However, this would only remain significant for the former when

corrected for multiple comparisons. No such significant association was found when the mother was 17 years of age, $\chi 2$ (1) = 2.04, p = .210.

Since loglinear analysis found a significant three-way model, it was not possible to look for lower-order effects within this analysis. Therefore, to consider the effect of age and SES as separate main effects it was necessary to conduct separate chi-square analyses. These found no association between mother's age in the vignette and whether participants identified social capital factors as influencing the situation, $\chi^2(2) = 2.02$, p = 364. In contrast, the more marked association between the mother's SES and this social capital category was found to be highly significant, $\chi^2(1) = 28.50$, p < .0001, with an odds ratio of 2.35 meaning that causes within this category were 2.35 times more likely to be cited when the mother seen was working class than when she was presented as middle class. This finding was highly significant and would remain so following correction for multiple comparisons.

Limited family or social support. A higher percentage of those who saw the youngest mother identified limited family or social support as a contributing factor (65.59%) than those seeing either older mother, with over 20% more responses including this factor for the 17-year-old mother than for the 35-year-old (45.54%) or 26-year-old mother (48.15%). Percentages endorsing this category according to mother's SES were similar, suggesting no association.

A more complicated interaction effect was suggested by the data, with percentage of participants citing this factor highest but similar across SES for the youngest mother. Again, this may be partially due to reduced SES differentiation owing to use of the alternative education-based SES proxy for the teenage mother compared to the occupational proxy used for the older mothers. In contrast, within the groups seeing both older mothers in the vignette, the effect of SES was in opposing directions: for those seeing the 26-year-old mother the

percentage citing this factor was 18.36% (and a factor of 1.46) higher when the mother was presented as middle class compared to working class whilst for those seeing the 35-year-old mother the percentage was instead 27.24% (and a factor of 1.87) higher for the working-class than middle-class mother.

A loglinear analysis identified a significant three-way model (mother's age x SES x presence or absence of limited family or social support cited as influential). The likelihood ratio of this model was $\chi 2$ (0) = 0, p = 1. This indicated that the highest-order interaction was significant, $\chi 2$ (2) = 9.98, p = .007. To explore this, separate chi-square analyses were conducted for each mother's age for the relationship between mother's SES and whether limited family or social support was cited as a factor. This showed that this finding was driven by a significant association between SES and citing social support as a factor among participants who saw the 35-year-old mother in the vignette only, $\chi 2$ (1) = 7.54, p = .009. No such significant association was found when the mother was 26 years old, $\chi 2$ (1) = 2.72, p = .122, or 17 years of age, $\chi 2$ (1) = .039, p = 1.00.

Since this higher-order interaction effect was modelled by the loglinear analysis, simple effects of mother's age and SES alone were explored using chi-square analysis. This confirmed no overall association between SES and whether limited support was identified as a cause in the situation, $\chi^2(1) = 1.43$, p = .302. The significance of the association between mother's age and this category was, however confirmed at the at the p < .05, $\chi^2(1) = 8.94$, p = .011. Pairwise post-hoc comparisons confirmed that limited family or social support was more frequently cited when the mother seen was 17 years of age than when she was either 26 or 35 ($\chi^2(1) = 5.39$, p = .022, odds ratio = 1.36, and $\chi^2(1) = 7.87$, p = .006, odds ratio = 1.44, respectively), while there was no difference between the groups seeing the older mothers ($\chi^2(1) = 0.12$, p = .766).

Inadequate parenting capacity or knowledge. The proportion of participants citing poor parenting or lack of parenting knowledge was more than 10% higher for the youngest mother (31.18%) than for either older mother, and almost double that of the group seeing the oldest mother (15.84%). This suggested that age of the mother may have influenced how likely participants were to suggest this cause. The difference for SES groups was much smaller (4.96%), suggesting that SES of the mother in the vignette alone was unlikely to be associated with how likely it is that factors encompassed by this category were cited. There was, however, a possible interaction effect of SES with mother's age in which there appeared to be a larger association between this category and SES within the groups seeing the 35-year-old mother. Here, the percentage was 10.33% higher for working-class than middle-class mothers, whilst the difference was much smaller (2.5% & 4.75%) for the younger mothers.

However, a loglinear analysis identified no significant influence of three-way interactions, $\chi^2(2) = 1.492$, p = .474, indicating that this interaction effect of mother's SES and age in association with likelihood of citing factors relating to parenting capacity and knowledge was not statistically meaningful. It did, however, retain the two-way interaction between this category and the mother's age, partial $\chi^2(2) = 6.767$, p = .0.34, but not for SES, $\chi^2(1) = 0.90$, p = .343, indicating that there was a significant influence of mother's age but not SES on whether this factor was identified. Post-hoc comparisons indicated that this finding represented the greater identification of this factor among those seeing the 17-year-old mother compared to those seeing the 35-year-old mother, $\chi^2(2) = 0.88$, p = .665. No significant difference was found between responses for the 26-year-old mother compared to either other mother.

Support plan and next steps.

Responses to the second open-ended question, "What do you think the next steps or ongoing support plan for Emma and Megan should be?", also varied in detail and length.

Ranging from three to 265 words, with a mean of 44.07 words and a median of 31 words, the positively skewed distribution of word counts indicated that shorter answers were more frequent.

Following several iterations of code development, codes were clustered into ten categories which represented the types of plans or next steps suggested by participants. These are shown in Table 3.19, with the number of participants who identified responses within each category reported alongside. Answers to this question frequently included multiple suggestions and the mean number of categories for next steps suggested per answer was 3.62 (median 4.00), with a minimum of one and a maximum of nine.

In line with the most cited causal factor, the most common plan or next step category was "mental health support, assessment, or treatment for Emma", with 85.45% of the sample providing such a response. This category included referrals to various services for further assessment, support, treatment, therapy, medication or investigation in regard to maternal mental health.

Despite additional health or developmental needs of the child being the fourth most commonly cited cause, 'medical or developmental assessment and support for Megan' was the category of next steps or plans suggested by the second highest percentage of participants (49.09%). In fact, this meant that it was suggested as a next step by more participants than cited this as a potential cause. This is likely because suggested plans do not directly map onto influential factors: for example, this category included Speech and Language Therapy input, which may have been suggested by some participants because they felt additional support

Table 3.19Categories developed from coding of the open-ended responses to support plans or next steps

Category	Codes encompassed by category	Number of
Category	codes encompassed by category	participants (%)
Mental health support, assessment, or treatment for Emma	Mental health support; Mental health screening; Mental health assessment; Treat depression; Individual therapy for Emma; Referral to wellbeing service/IAPT; GP to assess mental health need; Test for hormone/medical reasons for low mood	235 (85.45%)
Medical/developmental assessment and support for Megan	Further assessment for cause of underweight in child; Refer for Speech and Language Therapy assessment/input; Developmental review of child; Refer to paediatrician; Neurocognitive assessment of Megan; ASD assessment/ screening; Medical assessment/physical health check; Audiology referral for child; Test for neurodevelopmental disorders; Investigation of biological causes in child; Get baseline screenings for developmental difficulties;	135 (49.09%)
Parenting education and support (classes, family worker, modelling/advice)	Parenting support; Advice or support to increase interaction with Megan; Social interventions to help mum with parenting demands; Parenting skills teaching; Mother and baby classes; Advice about nutrition; Parenting courses; Educate mother about child's needs for healthy development; Support mum to increase stimulation; Community nursery nurse intervention to show Emma how to play to improve interaction; Nursery nurse support for play, diet and development; Life skills course; Support with/education about how to promote speech development; Home support/family worker; Modelling	124 (45.09%)
Enhance support network	play; Speech enrichment group; Parenting education Consider support network/ways to increase social support; Search for community support; Link with peer support; Find out about possible family support; Social interaction for mother; Children's centre outreach support to attend activities; Playgroups/mum and toddler clubs; Social support; Engage with parent groups; Social prescribing for Emma; 1:1 parental befriending; Find out about dad's role; Involve dad if possible; Involve other family; Signpost to local groups/activities;	106 (38.55%)
Childcare place/ activities for child's benefit	Childcare/EY education place; Childcare for stimulation of child; 2-year-old funding for nursery placement; Childcare/ playscheme placement for socialisation for Megan; Activities for child; Social interaction for child; Play therapy	49 (17.82%)

Table 3.20 (cont'd.)

Category	Codes encompassed by category	Number of participants (%)
Additional monitoring and increased universal professional input	Arrange regular reviews with HSC professional; Increased HV input; Regular growth and development checks for child; Monitor mother and child; Enhanced/intensive/universal plus HV service; Intensive HV support; Listening Visits: Support through relationship building to understand/assess/make support plan.	88 (43.64%)
Support to reduce financial/social capital/practical stressors	Benefits review; Assessment of financial /social needs; Assessment of/support to improve social circumstances; Support with benefits and finances; Financial support for childcare; Help with accessing suitable housing if needed; Food bank referral; Support mum to find work; Help with work-based skills; Consider discrimination/prejudices; Child care for respite; Time off for mum to look after self; Respite for mum; Support from school/employer; Support mum with education; Look for options to decrease work stress/increase flexible working	74 (26.91%)
Escalation of concerns (early help referrals; professionals meetings; safeguarding conversations; risk assessments; social services involvement)	Early help referral/input/assessment; Getting it Right for Every Child meeting; Conversation/assessment with Multiagency assessment hub; Common Assessment Framework (CAF); Multiagency Support Team (MAST) referral; Professionals meeting; Safeguarding lead conversations/advice; Risk/safety assessments; Social care/social services assessment/referral; Urgent children's service referral; Consider placement while further assessment undertaken; Raise safeguarding concern; Child protection plan; Child in Need plan; Safeguarding/vulnerable adult referral; Bring other services/MDT professionals together; Liaise with other professionals involved in care; Observe child in other settings/ask for information from other settings; Be on	107 (38.91%)
Attachment intervention	alert for risk of neglect/abuse/domestic violence VIG intervention; Attachment intervention; Therapeutic attachment work; Support to develop healthy attachment; Support to bond with child; Explore	29 (10.55%)
Unknown without further information	attachment Need more information/too little information to suggest plan; Not sure; Full assessment or in-depth clinical interview before could advise anything	17 (6.18%)

may be needed due to lack of parental speech stimulation rather than more fundamental medical or developmental issues. It may also be because screening for these issues to rule them out may be part of professional protocols in assessment, whilst the participant personally thought that other factors were more likely to be having a greater influence, therefore leading to a discrepancy between suggested causes and plans for next steps.

The 'parenting education and support' category encompassed all suggested plans to increase parenting quality and input via advice, modelling, direct support in the home, classes or teaching, and targeted parenting intervention groups. Plans within this category were cited by 45.09% of participants overall. This would suggest that a significant number of participants felt that some degree of support to change or improve parenting input would be beneficial for the child. More specific attachment intervention was also suggested in 10.55% of answers, which could also be understood as a specific parenting intervention.

A similar proportion of the sample (43.64%) endorsed plans within the "additional monitoring and increased universal professional input" category. This included increased reviews and input with the regular health or social care professional, reflecting an enhanced service within that usually provided to all mothers. Within this category, many answers identified the need for relationship building and rapport to support the mother in a compassionate way and, in doing so, better understand and assess the situation.

The 'escalation of concerns' category indicated that more serious concerns were present, with almost two fifths of the sample indicating a plan to escalate concerns (38.91%). This category encompassed any escalation of support or concerns beyond the usual universal or enhanced universal level of input. This included early help plans or assessments, safeguarding conversations, social care referrals, consideration of placements, and bringing multiagency professionals together. It is noted that these actions span a wide range of intensity of action and concern from early intervention to enacting immediate safeguarding

steps. However, they were frequently cited together within the same answers and the form of escalation and to whom varied, which may be partially due to differing job roles among participants. Therefore, it was not always possible to separate these concerns by severity in a meaningful way and this is reflected by this broader category.

In line with limited support being a cause identified by a significant proportion of participants, support plans encompassed by the category 'enhance support network' were suggested by 38.55% of the sample. This, in fact, is less than the proportion citing lack of support as an influence on the situation, possibly indicating that it was not seen as the most important cause or that other ways to reduce pressure on the mother were seen as easier or more important targets. Plans within the 'support to reduce financial, social capital or practical stressors' category were cited by 26.91% of the sample and this includes some suggestions that may be intended to combat a lack social support in parenting, such as childcare for respite. An alternative reason for childcare placement was coded separately under the 'childcare place or activities for the child's benefit' with 17.82% of participants indicating that they would look at the possibility of childcare placement or activities for the child to enhance stimulation and support development outside of the parenting relationship.

Finally, it is important to note that while many answers indicated a need for further assessment of the impact of certain causes (e.g. of mental health or additional needs of the child), a minority (6.18%) of participants provided answers indicating that they felt unable to suggest further steps without more information.

Influence of mother's age and/or social class on plans. Further exploration of the plans or next steps suggested was undertaken to consider any influence of the age and/or social class of the mother presented in the vignette. Since the number of participants who viewed each age and social class combination was unequal, the percentage of the group who suggested plans or next steps within each code were calculated and these are shown in Table 3.20 alongside a summary of the findings of the statistical analyses conducted for each category in turn. For several categories, it was not possible to statistically consider either main or interaction effects since assumptions were not met for chi-square or loglinear analysis, with more than 20% of cells having expected cell counts below five. Categories for which significant associations were identified with the age and/or SES of the mother, either alone or in combination, are described in detail below. Categories for which no such associations were found are not further considered here, but descriptions and analyses are detailed in Appendix H.

Parenting education and support. While the percentage of participants making recommendations within the category of 'parenting education and support' appeared similar across groups according to the age of the mother in the vignette, there did appear to be a marked difference according to the SES of the mother: the proportion making this recommendation was 17.63% higher among those presented with the working-class mother than for the middle-class mother, suggesting a potential influence of SES. Furthermore, a potential interaction effect was observed in which this effect of SES appeared greater when participants saw the youngest mother (a difference of 38.94%) compared to the 26- or 35-year-old mothers (differences of 12.3% and 5.11%, respectively).

Table 3.20 Percentage of participants endorsing each category of next steps/support plan according to characteristics of the mother

Category	Mother's age			Mother's SES			Vignette seen					Significant association?*		
	17y	26y	35y	WC	MC	17y, MC	17y, WC	26y, MC	26y, WC	35y, MC	35y, WC	Age	SES	Age x SES
Mental health support, assessment, or treatment for Emma	79.79%	87.50%	89.11%	86.39%	84.25%	73.81%	84.41%	89.47%	86.05%	89.58%	88.68%	X	X	X
Medical/developmental assessment and support for Megan	47.87%	52.50%	47.52%	48.30%	46.64%	50.00%	47.06%	50.00%	53.49%	39.58%	54.72%	X	X	X
Parenting education and support	44.67%	41.25%	48.51%	53.06%	35.43%	23.81%	62.75%	34.21%	46.51%	45.83%	50.94%	X	✓	✓
Enhance support network	32.98%	43.75%	39.60%	38.10%	38.58%	23.81%	41.18%	57.89%	30.23%	35.42%	43.40%	X	X	✓
Childcare place/ activities for child's benefit	22.34%	12.50%	17.82%	16.33%	18.90%	26.19%	19.61%	7.89%	16.28%	20.83%	15.09%	X	X	X
Additional monitoring/ increased universal professional input	40.43%	42.50%	47.52%	48.30%	38.58%	23.81%	52.94%	50.00%	37.21%	43.75%	50.94%	X	X	✓
Support to reduce financial/social capital/practical stressors	37.23%	22.50%	20.79%	29.93%	22.83%	33.33%	41.18%	21.05%	23.26%	14.58%	26.42%	✓	X	X
Escalation of concerns & early intervention	39.36%	41.21%	36.63%	40.14%	37.80%	38.10%	41.18%	36.84%	44.19%	37.50%	35.85%	X	X	X
Attachment intervention	11.70%	15.00%	5.94%	9.52%	11.81%	14.29%	7.84%	21.05%	11.63%	4.17%	7.55%	X	X	-
Unknown without further information	3.19%	3.75%	10.89%	5.44%	7.09%	4.76%	1.96%	5.26%	2.33%	10.42%	11.32%	✓	X	-

WC: working class; MC: middle class; y: years; ✓: association found; X: association not found; -: did not meet test assumptions for analysis.

^{*}Significant at the p < .05 level.

The presence of an interaction effect between SES and age of the mother in the vignette was confirmed using loglinear analysis, which identified a significant three-way model (mother's age x SES x whether parenting education and support were recommended). The likelihood ratio of this model was $\chi 2$ (0) = 0, p = 1. This indicated that the highest-order interaction was significant, $\chi 2$ (2) = 6.11, p = .047. To explore this, separate chi-square analyses were conducted for each mother's age for the relationship between mother's SES and whether parenting education and support was recommended. This showed that this finding was driven by a significant association between SES and recommending parenting education and support among participants who saw the 17-year-old mother in the vignette only, $\chi 2$ (1) = 13.38, p = < .0001, with an odds ratio of 2.64 meaning that this recommendation was 2.64 times more likely to be made for the youngest mother when she was presented as working class compared to when she was presented as middle class. No such significant association was found when the mother was 26 years old, $\chi 2$ (1) = 1.06, p = .303, or 35 years of age, $\chi 2$ (1) = 0.263, p = .608.

With the loglinear analysis identifying this significant three-way interaction, it was necessary to consider main effects of age and SES in separate chi-square analyses. No association was found between mother's age and whether parenting education and support was recommended, $\chi 2$ (2) = .961, p = .615. In contrast, this did confirm a significant association between the mother's SES and recommendations of parenting education and support, $\chi 2$ (1) = 8.89, p = .004, with an odds ratio of 1.5. This means that this recommendation was 1.5 times more likely to be made when the mother was working class than when she was presented as middle class.

Enhance support network. The percentage of responses recommending ways to enhance the support network was lower when the mother was youngest (32.98%) than for either the 26- or 35-year-old mothers (43.65% and 39.60%, respectively). In contrast, these percentages were almost identical for the two SES groups. However, when separated into the six age and SES combinations of the vignettes, there were some larger differences reflecting possible age and SES interaction effects. For the 17-year-old mother, the proportion of participants making this recommendation was 17.37% higher when presented as working class than middle class, while the difference was even greater (27.66%) but in the opposite direction for the 26-year-old mother. For the 35-year-old mother the difference was much smaller (7.98%), with the percentages similar for both SES groups.

The presence of an interaction effect between SES and age of the mother in the vignette was confirmed using loglinear analysis, which identified a significant three-way model (mother's age x SES x whether enhancing the support network was recommended). The likelihood ratio of this model was $\chi 2$ (0) = 0, p = 1. This indicated that the highest-order interaction was significant, $\chi 2$ (2) = 10.60, p = .005. To explore this, separate chi-square analyses were conducted for each mother's age to assess the relationship between mother's SES and whether this category was cited. This showed that the interaction was driven by a significant association between SES and recommendations for enhancement of the support network among participants who saw the 26-year-old mother in the vignette only, $\chi 2$ (1) = 6.90, p = < .009, which indicated that this recommendation was significantly more likely when the mother was presented as middle class, with an odds ratio of 1.91. No such significant association was found when the mother was 17 years old although there was a trend toward significance, $\chi 2$ (1) = 2.88, p = .089, with an odds ratio of 1.73 in the opposite direction (i.e. more likely for the working-class than middle-class mother mother). No

significant association or trend was seen for the 35-year-old mother in the vignette, $\chi 2$ (1) = 0.67, p = .413.

Since this higher order loglinear model was confirmed, the potential influence of the mother's age and SES as separate main effects was investigated using separate chi-square analyses. These found no significant association between mother's age and whether steps to enhance the support network were recommended, $\chi^2(2) = 2.19$, p = .334. Unsurprisingly, given the almost identical percentages described earlier, no association between SES and recommendation of enhancing the support network was found either, $\chi^2(1) = 0.00$, p = 1.0.

Additional monitoring and increased universal professional input. Percentages of participants recommending next steps encompassed by the 'additional monitoring and increased universal professional input' category suggested minimal influence of the age or SES of the mother alone. Plans within this category were most likely to be recommended by participants presented with the oldest mother (47.52%) and least likely to be a recommended approach by those who saw the youngest mother (40.43%), but this difference was not especially large at 7.09%. A similar difference was seen between SES groups (9.72%), with this recommendation more common when presented with a working-class (48.30%) than a middle-class mother (38.58%).

Greater differences were found, however, when age and SES were considered in combination, suggesting a potential interactive association between these factors and the likelihood of plans encompassed by this category being suggested. For the youngest mothers, there was the greatest difference between the proportions of those making this recommendation according to the SES of the mother, with the proportion markedly (29.13%) higher when the mother was presented as both 17 years old and working class (52.94%) than when the mother of the same age was presented as middle class (23.81%). The influence of

SES appeared much smaller within the groups seeing the older mothers, with a 12.79% difference (middle class higher) when the mother was 26 years old, and only a 7.19% (working class higher) difference when the mother was presented as 35 years of age.

The significance of this interaction effect between SES and age of the mother in the vignette was confirmed using loglinear analysis, which identified a significant three-way model (mother's age x SES x whether additional monitoring and increased universal professional support was recommended). The likelihood ratio of this model was $\chi 2$ (0) = 0, p = 1. This indicated that the highest-order interaction was significant, $\chi 2$ (2) = 8.00, p = .018. To explore this, separate chi-square analyses were conducted for each mother's age for the relationship between mother's SES and whether additional monitoring and increased universal professional support was recommended. This showed that this finding was driven by a significant association between SES and recommending additional monitoring and increased universal professional support among participants who saw the 17-year-old mother in the vignette only, $\chi 2$ (1) = 8.70, p = .006, with an odds ratio of 2.22, meaning that this recommendation was 2.22 times more likely to be made for the youngest mother when she was presented as working class compared to when she was presented as middle class. No such significant association was found when the mother was 26 years old, $\chi 2$ (1) = 1.07, p = .367, or 35 years of age, $\chi 2$ (1) = 0.523, p = .551.

Since loglinear analysis is a hierarchical model, it is not possible to look for lower order models within it once a higher order model has been identified. Therefore, to consider the effect of age and SES as separate main effects it was necessary to conduct separate chi-square analyses. These found no association between either the mother's age or SES in the vignette and whether additional monitoring and increased universal professional support was recommended (χ 2 (2) = 1.06, p = .620, and χ 2 (1) = 2.45, p = .143, respectively).

This therefore indicates that while there was a significant association between whether additional monitoring and increased universal professional support were recommended and the age and SES of the mother in combination, there was no main or direct association between this recommendation and the mother's age or SES alone.

Support to reduce financial/social capital/practical stressors. The age of the mother presented in the vignette appeared to have a clear association with whether recommendations were made which were encompassed by this category, with the percentage of participants making this recommendation clearly higher among those who saw the youngest mother (37.23%) than among those who saw either of the older mothers for whom the percentages were more similar (22.50% and 20.79%). There was no such clear influence of SES, with the percentage of the overall working-class group only 7.1% above that of those presented with a middle-class mother in the vignette. Considering the potential interactive effect of mother's age and SES, percentages were higher when the mother was working class than middle class and either 17 or 35 years of age, although this difference was of lesser magnitude than the effect of age alone (7.85% and 11.84% difference, respectively), while percentages were similar among participants seeing the middle- and working-class 26-year-old mothers.

A loglinear analysis retained no significant three-way interaction, $\chi 2$ (2) = 0.82, p = .663, but did retain the two-way interaction between the age of the mother in the vignette and whether participants recommended plans including support to reduce financial, social capital or practical stressors. The likelihood ratio of this model was $\chi 2$ (6) = 4.472, p = .613, and the partial chi-square for this two-way interaction was $\chi 2$ (2) = 7.491, p = .024. The two-way interaction between mother's SES and this recommendation category was not significant and was not retained in the model (partial chi-square = $\chi 2$ (1) = 1.886, p = 0.170).

The association between mother's age and whether support to reduce financial, social capital or practical stressors was recommended was explored with pairwise chi-square analyses. This showed that the proportion of participants making recommendations encompassed by this category was significantly higher among those presented with the 17-year-old mother than when the mother presented was either 26 or 35 years of age (χ 2 (1) = 4.43, p = .047, and χ 2 (1) = 6.43, p = .012, respectively), while no difference was found between the 26 and 35-year-old mothers, χ 2 (1) = 0.08, p = 0.856. The magnitude of the difference between the proportions making this recommendation for the 17-year-old mother compared to the 26- and 35-year-old in terms of odds ratios was 1.65 and 1.79, respectively, meaning that this recommendation was over 1.5 times more likely to be made by participants given the vignette describing a teenage mother.

Therefore, overall, there was a significant association between the mother's age in the vignette and whether plans included support to reduce financial, social capital, or practical stressors; specifically, this was most likely for the youngest mother. However, no association was found between this recommendation and the SES of the mother in the vignette, either alone or in interaction with the mother's age.

Unknown without further information. This category represented responses in which participants declined to offer potential plans, for example, due to insufficient information in the vignette alone. This category encompassed only a small number of answers overall, since most participants made some suggestions or gave indications of the direction of further assessment which were encompassed by alternate categories. The percentages for the different ages of the mother would suggest that this response was more common among participants presented with the oldest mother (10.89% compared to 3.37% for the 26-year-old mother and 3.19% for the youngest mother), but very similar irrespective of mother's SES

(Table 3.21). While there were some differences across the different vignette versions, the number of participants seeing each of these combinations of mother's age and SES and rated positive for this category were so small that drawing conclusions based upon this would be unlikely to be meaningful, and indeed further investigation with loglinear analysis would not have been valid since test assumptions were not met.

Considerations of the main effect of mother's age or SES separately were undertaken using chi-square analyses, which did meet test assumptions of <20% cells containing an expected count of less than five. For mother's SES, no significant association was found with the likelihood of answers in the category being given, $\chi^2(1) = 0.33$, p = .621. However, there was a significant association with the mother's age in the vignette, $\chi^2(2) = 6.13$, p = .048. Pairwise comparisons confirmed that this reflected a significantly higher representation of this answer when participants saw the oldest mother compared to the youngest mother, ($\chi^2(1) = 4.33$, p = .037), but did not find a significant difference between the 26- and 35-year-old mothers ($\chi^2(1) = 3.190$, p = .075). Pairwise comparison between the younger two mothers again suggested cause for caution in interpreting these findings and could not be conducted due to 50% of cells having an expected count of less than 5, though the very similar percentages would strongly suggest a lack of difference.

Consequently, this indicates that participants were more likely to state that would require further information when the mother seen in the vignette was 35-years of age than for the younger mothers. However, the small number of participants providing such an answer overall reduces confidence in the generalisability of this finding.

Chapter 4: Discussion

Chapter Overview

This chapter begins by summarising the main findings reported in the analyses presented in the previous chapter, integrating the findings across outcome measures and considering them in context of the study methodology and in light of previous literature. Limitations of the study are then discussed, including those specific to the current study as well as the type of methodology more broadly. Finally, the clinical, practical and research implications of the findings are considered.

Summary of Findings

This study aimed to assess whether the mistrust of and judgement by professionals and services expressed by some young mothers, and well documented in the literature, is a valid concern. To do so, the study investigated whether age and SES of the mother, either independently or interactionally, affected causal attributions and judgements made by health and social care professionals. Open text responses about this decision-making were also invited to enable a more qualitatively detailed exploration of the types of influential factors that professionals may consider as being relevant to the situation and the types of support plans or next steps that they would suggest.

In total, 275 professionals completed the online questionnaire. Consequently, recruitment exceeded the required sample size of 244 participants estimated by the *a priori* power analysis for adequate sensitivity to identify a small to medium effect size in relation to the main study aim of investigating the influence of maternal age and SES on causal attributions and judgement ratings of welfare concern and parenting capacity. This study is, therefore, the second and the largest study, to date, to systematically consider how these

characteristics of the mother may impact on professionals' understandings and decision-making. No significant differences were found between the groups for any of the demographic variables (age, gender, job role, qualification status, or years of experience). The sample recruited for this study represented an increase of 37.5% compared to the 200 health visitors surveyed by Taylor et al. (2009), which is the only previous study identified that has attempted to experimentally manipulate and assess the influence of these characteristics.

The specificity of the current study in focusing on maternal age and SES also provided benefits in terms of the depth of detail in which professional's understandings and judgements could be explored. In contrast, Taylor et al. (2009) manipulated a much greater range of situational factors, with each participant seeing eight different randomised combinations. Consequently, it is likely that participants may have quickly become aware of which factors were under consideration and may have responded in a way that would minimise the demonstration of biases about characteristics of the mother that they may feel could indicate prejudice; mother's age is likely to be one such characteristic. In addition, Taylor et al. asked only for a single rating of 'good enough' parenting on a 1-10 scale but did not explore the causal attributions made about the situation and the extent of concern for the mother and the child. This study replicated the question of 'good enough' parenting through asking for a rating of parenting capacity from very low to very high, but additionally considered the ways in which professionals made sense of the situation and how these factors may influence the extent of concern for the welfare of both mother and child. Furthermore, the current research also invited open-ended responses about influences and future planning which could be integrated with the quantitative ratings to further contextualise and understand the findings.

To assess causal attributions, the CDS-II was adapted for use in the study by altering the subject of the scale items from the self to the mother. This adaptation was similar to the amended version used by Kyne and William's (2007) in their exploration of how causal attributions influence criminal sentencing. Nevertheless, since this represented a significant alteration of the original scale, the properties of the adapted scale were first assessed using a confirmatory factor analysis and principal components analysis which, together, indicated adequate fit of the original four-factor structure of the CDS-II, mapping onto four attributional subscales: locus of causality, personal control, external control, and stability. Consequently, the adapted CDS-II items were summed for each subscale and analysed accordingly.

For this sample of professionals, overall, locus of causality subscale scores averaged just above the midpoint of the scale, indicating that the locus of causality attributed to the scenario gave slightly greater weight to situational factors rather than within the mother. Similarly, personal control subscale scores, on average, fell just above the midpoint of the scale too, indicating that, overall, personal control was neither felt to be particularly lacking nor especially strong. External control ratings were slightly lower than those for personal control, but still averaged just above the midpoint of the scale, suggesting that overall external control was felt to be less influential than personal control factors, but again that this was not a systematically extreme evaluation. Considering stability, on the other hand, the average subscale scores were further towards upper end of the scale, indicating that, on the whole, the scenario described was felt to be a fairly stable and unchanging situation, although, again, this was not a ceiling effect and was not extreme in nature. Together, this suggests that no single attributional factor took clear priority in making sense of the situation.

In contrast to the attribution subscale scores, ratings of welfare concern for both the child and mother averaged towards the upper end of the zero to ten scale. This indicates that,

overall, participants did identify concerns about the welfare of both mother and child presented in the vignette, although once again ratings did vary; some professionals rated very high concern whilst others rated concern at the much lower end of the scale. Parenting capacity averaged around the lower mid-point of the scale, but again varied across the entire zero to ten scale.

It is important to note, here, that the average scores falling around the midpoint are not simply indicative of a response bias in which participants select the middle of a scale, perhaps owing to uncertainty as to the appropriate response. The range of scores indicates that almost the full range of possible scoring was represented in the responses given for each of the subscales and distributions of scores approximated a normal distribution. Furthermore, the variation in ratings across professionals for all outcome ratings does indicate that the situation was ambiguous, as intended, and demonstrates how professionals can differ markedly in their initial approaches and first impressions about what may be going on when starting work with a new client or patient. It is perhaps in these initial impressions, prior to getting to know the client and their specific needs and strengths, that prejudice may be most likely to influence how professionals view the situation (i.e. people are most likely to rely on biases in the absence of more detailed information). As described in the literature, however, these initial impressions can be critical in engaging clients, with young mothers describing how initial negative interactions with health professionals or anticipating and perceiving judgement made them reluctant to use or return to services (Home-Start UK, 2019; Ross et al., 2012; Norman et al., 2016).

The variety of influential factors cited in the first open-ended question also provided support to confirm the ambiguity of the scenario as described in the vignette. The situation described was intended to be ambiguous and highlight possible concerns both regarding the mother's emotional wellbeing and the child's development. The most frequently cited type of

cause or factor influencing the situation was maternal mental health or wellbeing, with over 90% of participants providing a response including this factor. Consequently, this clearly indicates that most participants attended to possible maternal mental health concerns outlined in the vignette which may be influencing the situation. The proportion identifying potential additional health or developmental issues for the child was almost half of the amount citing maternal mental health concerns. This suggests that, while the child's developmental needs were considered potentially relevant by a marked proportion of the sample, overall, the mother's mental health was seen as having greater weight.

Correspondingly, the most common recommendation for next steps or a support plan was for mental health support or assessment for the mother. Interestingly, however, the second most frequent recommended next step was medical or developmental assessment and support of the individual, with a greater proportion of the sample suggesting this plan than had identified additional developmental or health needs of the child as an influential factor. It may be that professionals identify additional needs of the child as important to exclude, while thinking that alternative influences are more likely to be relevant in the scenario.

This is potentially in line with the statistics and experiences of health professionals working with mothers in terms of the relative prevalence of maternal mental health difficulties compared to developmental delay or difficulties in infants. Given knowledge of how frequently mothers may experience difficulties with their emotional wellbeing (e.g. PND is estimated to affect 23% of all mothers in Europe; Arifin et al., 2018), in addition to the literature about the impacts of maternal mental health difficulties on attachment, maternal emotional availability and parenting sensitivity and responsivity (Grace et al., 2003; Martins & Gaffan, 2000; Murray & Cooper, 1997), it may make sense that higher weight is first given to this factor. Furthermore, social or family support and social capital were also cited by a slightly higher proportion of the sample than that citing developmental concerns for the child.

Again, similar knowledge and experience on the part of professionals about how these factors can impact maternal wellbeing and influence opportunities for the child may be implicated.

Effects of mother's age and SES on understandings of the situation and recommended support plans

The primary research question concerned the potential influence of maternal age and SES on causal attributions and judgements about welfare concern and parenting capacity. The presence or absence of significant effects of the mother's age and SES, alone and in combination, is summarised in Table 4.1. Overall, age was found to be significantly associated with the extent to which professionals rated the mother as having personal control in the situation (personal control subscale) and with ratings of concern for the mother's welfare and parenting capacity. No main effect of the mother's age was found for any of the other subscales and judgements, indicating that mother's age was not influential on how professionals made sense of the situation in terms of locus of causality, external control, stability or their concern for the child. SES was not found to have any main effect on any of the causal attribution scores but was associated with the extent of concern indicated for the welfare of both the mother and the child. In combination, a significant interaction between age and SES of the mother presented in the vignette was only found for the external subscale score.

Considering maternal age, personal control subscale scores were lowest for the 26-year-old mother, while no difference was found between the youngest (17-year-old) and oldest (35-year-old) mothers. This means that the youngest and oldest mothers were rated as having greater personal control in the situation than when the mother was 26 years of age. It is unclear why this would be the case, though the difference was not particularly large.

Presence or absence of significant association between maternal age and SES, alone and in combination, with causal attributions and judgements about welfare concern and parenting capacity.

Table 4.1

Outcome	Significant association?									
	Mother's age	Mother's SES	Mother's age x SES							
Locus of causality subscale	X	X	X							
Personal control subscale	✓	X	X							
External control subscale	X	X	✓							
Stability subscale	X	X	X							
Concern for mother's welfare rating	✓	✓	X							
Concern for child's welfare rating	X	✓	X							
Impression of parenting capacity rating	✓	X	X							

Speculatively, this could be because the mother is not seen as either a young or older mother and so perceived to be of average maternal age, which has steadily climbed in England and Wales to a high of 30.7 years in 2019, with later 20s being common over the previous decade (ONS, 2020b). This may mean that she was assumed to be following a trajectory in line with a large proportion of her peers and is therefore thought likely to be able to seek out and find support from peers to whom she can relate well.

There did, however, appear to be an impact of young motherhood on how the situation was understood in terms of the judgements made about concerns for welfare and parenting capacity. Ratings of concern for the mother's welfare were significantly higher for the youngest mother than the oldest mother, with the ratings for the 26-year-old mother

falling in between and not differing significantly from either of the other mothers. This indicated that the greatest concern was exhibited for the youngest mother with a linear decrease in levels of concern as the mother's age increased. This is in line with the hypothesis that greater weight or attention may paid to the mother's own vulnerability when she is younger. Such a conjecture may have been strengthened by a finding suggesting greater external control, reduced personal control or greater external locus of causality, which were not found beyond the lower ratings of personal control for the 17-year-old mother compared to the 26-year-old mother only. Nevertheless, this still indicates that when the mother presented in the vignette was a teenage mother, there was greater concern for her welfare in the absence of any other additional information compared to the older mothers.

Potential reasons for this increased concern include the possibility that participants used the information that she was 17 years of age as a proxy indicator for other vulnerabilities or welfare concerns, given the associations previously reported of higher incidences of these factors in the lives of teenage mothers. This may include financial difficulties, lower social support, likelihood of having experienced or of continuing to experience abuse, or the greater risk of developing postnatal mental health difficulties within the context of symptoms suggesting concern about the mother's emotional wellbeing. Given that this finding represented a main effect of age in the absence of an interaction effect of maternal age and SES on extent of concern for the mother's welfare, the representation of these factors elicited by the mother being presented as a teenage parent would appear likely to be a complex interaction of possible vulnerabilities.

Furthermore, in addition to higher concern for the youngest mother's welfare, parenting capacity was rated significantly lower when the mother was presented as 17 years of age than for either of the older mothers, whilst no difference was found between these ratings for the 26 and 35-year-old mothers. Given the lack of any other differing information

between the vignettes, with SES not found to have a significant influence on parenting capacity ratings, this does suggest that there was something about the age of the mother itself which led the professionals to rate her parenting capacity as lower.

Again, this is interesting in the context of the higher concern for the mother but not for the child. It may be that professionals were more concerned about the mother's mental health when she was younger and therefore felt that this would affect parenting capacity. Equally, the other factors that may be associated with young parenthood, such as poverty, poorer support networks and poor housing, may be seen as holding back her parenting capacity. However, this would be expected also to be shown in the causal attribution ratings. For example, weight placed on poverty and poor housing may be expected to shift locus of causality ratings towards the situation or factors outside of the mother. In addition, there was no significant main effect of SES on parenting capacity, which one may also expect to elicit similar representations of need. Similarly, there was no indication that the situation was perceived as any more or less stable or likely to change according to age.

Alternatively, the lower ratings of parenting capacity, are consistent with a narrative of developmental age-related influences on parental ability. This fits with the theory of maternal development for teenage parents developed by Atkinson and Peden-McAlpine (2014), which conceptualised teenage parents as needing to move through stages of maternal development from an immature state in which their life choices are poor, parenting capacity is limited and they are heavily reliant on others, towards a more responsible and self-efficacious maternal identity, with the help of the professionals argued to be crucial in bringing about this shift. Since this theory was derived through interviews with public health nurses, this does indicate that these nurses, at least, felt that the teenage mothers lacked parenting capacity and maturity. This is also reflected less overtly in the in-depth qualitative examination of interactions between service providers and teenage mothers undertaken by

Lea (2006). Lea documented how decisions were often made amongst professionals with only cursory or token interest paid to the views or goals of the mother, with little sensitivity shown in the way that they overrode or dismissed the mother's input. The power imbalance between the mothers and the health professionals was highlighted as particularly marked with both professionals and mothers believing the professionals to have greater expertise. This meant mothers were reluctant to assert their opinions which, combined with the fact that professionals typically had greater power to make decisions and often failed to encourage exploration or consideration of the mothers' views or explain the array of options, meant that mothers ultimately had little say in decisions involving their children and, largely, felt resigned to this status quo.

These possible explanations for the identified influence of maternal age on welfare concern and impressions of parenting capacity were further considered and explored through analysis of the open-ended responses regarding causes or influential factors in the scenario. Unsurprisingly, mother's age itself was significantly more frequently stated as an influential factor when the mother presented was 17 years of age than for either older mother. In fact, this reason was given by more than one-third of the participants who saw vignette versions with the youngest mother, whilst it was only cited by a single participant among those viewing the older mothers. It is important to note that maternal age was only coded as a distinct factor when it was provided as a response without qualification as to its impact (e.g. likely to have reduced peer group support or higher likelihood of financial difficulty). This does suggest mother's age, in itself, was seen as a causal or influential factor for the situation by many of the professionals who viewed vignette versions with the teenage mother. It is possible that this was used as a 'shorthand' for the various risk factors that are both associated with risk of becoming a young mother, as well as more negative outcomes for mother and child, but was used by these participants without further explanation. However,

the frequency with which other risk factors cited differed according to maternal age was varied. Limited social or family support was significantly more frequently given as an influential factor for the teenage mother compared to both older mothers, with no difference between the 26- and 35-year-old mothers for this factor. On the other hand, other factors that may be associated with young parenthood, such as the poverty and financial concerns encompassed by the social capital category, did not differ according to the age of the mother in the vignette; if this had been included in the representation of young parenthood that led participants to cite maternal age as a factor, one would have expected social capital also to have been more frequently cited for the teenage mother than the older mothers. This latter finding does, again, lend support to the assumption that teenage parenthood was not fully conflated with SES and, therefore, that the differential use of educational and occupational indicators of SES according to maternal age did not present too great a confound.

Furthermore, inadequate parenting capacity or knowledge was identified as an influential or causal factor significantly more frequently for the teenage mother. This indicates that professionals did view the teenage mother as less capable and felt this was implicated in the situation. This fits with the previously described finding that parenting capacity was rated lower when the mother presented in the vignette was a teenage mother. It suggests that at least part of the reduced parenting capacity was related to an assumption that the mother was more likely to lack knowledge or have poorer parenting ability rather than the lower parenting capacity being wholly explained by possible external factors restricting this ability. Considering this in context of the finding of greater concern for the mother's welfare without similarly elevated concern for the welfare of the child, this does fit with a hypothesis where low expectations of what the mother can provide in terms of 'good' parenting may mean that difficulties arising for the child are viewed as an inevitable part of parenting by a young and inexperienced mother. The greater identification of limited support as a potentially

Influential factor may also indicate high emphasis placed on the mother's need for support. Together, lower expectations of parenting ability and consequently of the support for the child's development that she can provide, alongside increased concern for the mother's own support needs, may lead to situations where the child's needs may be overshadowed by those of the mother. This is in line with the SCR report warning that high vulnerability and complex needs of parents can mean the child's needs are not given the primacy they warrant (Brandon et al., 2020).

Considering the influence of maternal SES independently, the only significant main effects were found on the ratings of concern for both the mother and child's welfare, which were both higher when the mother was presented as having disadvantaged SES. As discussed previously, greater concern for mother and child associated with disadvantaged SES may make sense in the context of lacking resources to improve the situation and the associations in the literature between poverty and mental health and between poverty, housing insecurity and related factors and child health (Bell, 1990; Kessler et al., 2005; Lach et al., 2011; Pevalin et al., 2017; Shelter, 2006; Suglia et al., 2011). However, there was no difference in locus of causality ratings according to maternal SES, which one may expect to differ if reduced resources to ameliorate the situation are implicated in the greater concern for both child and mother. Nevertheless, this does suggest that socioeconomic disadvantage was used as a relevant indicator to inform the extent of concern warranted for the mother and child described in the vignette.

The relevance of lack of resources associated with socioeconomic disadvantage is lent support by the analysis of the open-ended responses about potential causes and influential factors, with social capital being identified as a factor significantly more frequently when the mother was unemployed. In fact, only two categories of causal or influential factors were found to differ significantly according to the SES of the mother in the vignette:

stress/competing demands and social capital. Stress of competing demands on maternal availability was significantly more frequently identified when the mother was presented as middle class, while social capital was more commonly cited in relation to working-class mothers. This suggests that the forms of stress understood as influencing the situation differed according to the SES of the mother, in line with expectations of the types of stress that may be involved with parenting and holding down a demanding job or educational studies or with being unemployed and the likely financial and related stressors this may cause. This further indicates, therefore, that the indicators of SES employed in the current study were adequate proxies.

Furthermore, the lack of any interaction effect between maternal age and SES for ratings of concern for the welfare of either the mother or child, in addition to the fact that maternal age was not found to be an influence on concern for the child, does again suggest young motherhood was not wholly conflated with disadvantaged SES in this study. In fact, the only interaction effect identified between age and SES was for external control subscale scores, which was driven by a significant difference according to SES only for the oldest mothers. Specifically, the situation for the middle-class 35-year-old mother was rated as being under higher external control than when the 35-year-old mother was presented as unemployed.

It was not possible to assess the interactional effect of maternal age and SES for all causal categories when exploring the qualitative responses regarding causes or influential factors, since subdivision into the six vignettes reduced the tally of responses in each group too greatly. However, interaction effects were found for two of the categories, both of which were driven by differences according to SES within the groups seeing the 35-year-old mother only. Specifically, social capital was significantly more commonly cited as an influential factor for the 35-year-old mother when she was presented as unemployed rather than a

teacher; a similar finding was found for the 26-year-old mother but was attenuated and not statistically significant. For limited family or social support, a significant difference according to SES was found in the opposite direction for the 35-year-old mother only. It is possible that the influence of SES was greatest only for the oldest other since it may be assumed, when the 35-year-old mother is presented as a teacher, that she has had a longer career and therefore has more financial stability than for either of the younger mothers.

Alternatively, or additionally, it may be assumed that for the unemployed 35-year-old there may be longer-term financial instability and disadvantage. Considering social or family support, it may be that professionals assume an older mother with a career is more likely to have peers who are also having children at a similar age, having delayed childrearing for their career, while those who do not pursue a career may be more likely to have children at a younger age (Mills et al., 2011).

Considering the recommended next steps or support plans, however, did not necessarily align with the cited causes or influential factors, particularly in terms of the influence of maternal age and SES. The proportion of participants making recommendations for enhancing support networks was similar for the 35-year-old mother irrespective of SES, while for the younger mothers this was in opposing directions; for the 26-year-old mother this was more frequently cited when the mother was a teacher than unemployed, while for the 17-year-old mother this was most common when unemployed compared to studying. However, this was only significant for the 26-year-old mother with a trend towards significance for the youngest mother. It is possible that for the 26-year-old mother there may be an assumption that working as a teacher may be preventing the mother from developing a peer group of other mums that the unemployed 26-year-old may have more easy access to as a 'typically' aged mother. On the other hand, though notably not a significant difference, when the teenage mother was identified as studying, she may be assumed to be linked into a peer

group, while the unemployed 17-year-old mother may be seen as different to her older stayat-home counterparts. This appears to contrast with the higher frequency at which limited
family or social support was found for the youngest mother only, with this similar across
SES, although does fit with the lower frequency at which this cause was identified for the 26year-old mother when she was presented as unemployed compared to when she was
presented as a teacher.

In addition, education and parenting support was recommended by just under half of the participants and the likelihood of professionals making this suggestion was not influenced by age but was associated with the mother's SES, although there was a significant interaction between maternal age and SES. Specifically, professionals were significantly more likely to suggest this plan of action when the mother was unemployed, and this SES difference was most pronounced for the teenage mother. This is despite the analysis of influential factors or causes stated by participants finding that inadequate parenting capacity or knowledge was more frequently cited for the teenage mother only, with no association with SES, either alone or in interaction with the mother's age. Similarly, recommendations of support to reduce financial, social or practical stressors were found to be suggested most frequently for the teenage mother, despite the only association with the frequency at which social capital factors were cited as causes being the mother's SES.

Consequently, the proportion of professionals making some recommendations appeared out of sync with the rate at which associated causes were cited. Considering parenting education and support, it is possible that young motherhood was associated with poorer parenting capacity and knowledge with reduced expectations of the level to which this could be improved meaning that recommendations focusing on reducing financial or social capital stressors were seen as an 'easier win'. Equally, reducing social capital stressors may be more frequently recommended for the youngest mother than the older mothers owing to a

focus on the mother's vulnerability and needs. It is perhaps interesting the small proportion of participants who responded to say that they did not know what steps to recommend without further detail about the situation were significantly more likely to have seen the 35-year-old mother than either of the younger mothers. It is possible that professionals felt able to make more assumptions based on the ages of the younger mothers.

Relationships between attributions and judgements

A secondary aim of the study was to consider the relationships between the causal attributions made about the situation and the judgements about welfare concern and parenting capacity, including whether causal attributions play a mediating role in the judgement ratings. Overall, the associations between the attributional factors were as would be expected, with locus of causality correlated positively with personal control and negatively with external control. Stability was associated with greater personal responsibility, with a locus of causality placed more within the mother than situation and the mother having greater personal control in the situation, in line with previous use of the CDS-II (McAuley et al., 1992). All judgements about welfare concern and parenting capacity were significantly intercorrelated, with higher concern for the mother associated with higher concern for the child and with lower impressions of parenting capacity. This latter finding is perhaps particularly interesting when considering the finding that ratings of parenting capacity were significantly lower, and extent of concern for the mother's welfare significantly higher, for the teenage mother in the vignettes, while a similar impact on concern for the child of the teenage mother was not seen. Again, one possibility is that the potentially greater concern for the mother overshadows that of the child. Importantly, however, concern for the child was not lower for the offspring of the teenage mother compared to when the mother was presented as older.

Significant correlations were also found between some of the causal attribution scores and judgement ratings of welfare and parenting capacity, suggesting some association between understandings of the situation in terms of these attributions and the judgements or decisions which may inform need for intervention. Lower parenting capacity and greater concern for welfare of both mother and child were associated with attributions further towards causes within the mother than the situation. Attribution of greater personal control was associated with higher concern for the child's welfare and lower parenting capacity, and reduced stability with increased concern for the mother's welfare.

However, exploration of the potential mediatory function of attributions in the relationship between maternal age and SES and ratings of concern and parenting capacity found no evidence of any mediatory effect. This is somewhat unsurprising given that almost all findings of an influence of maternal age and/or SES were on the judgements about welfare concern and parenting capacity rather than the causal attributions made. It is possible that these judgement-based ratings of welfare concern and parenting capacity more specifically capture the kind of considerations used to understand what is happening for the mother and child. This may be because causal attributions do not have any significant influence in making sense of the situation at all, although this appears unlikely given the associations found between some causal attribution scores and ratings of parenting capacity and welfare concern. It appears more likely that the attributional scales did not adequately capture the type of information elicited by age and SES factors; it may be that the influence of age and SES on these judgements is independent of, or greater than, the considerations captured by the causal attribution scales, meaning that the impact of causal attributions is overshadowed or separable from the influence of these characteristics of the mother.

Limitations

Several limitations of the study concerning the sample and methodology have been identified and discussed throughout this thesis. Regarding the sample of professionals, imbalances in the characteristics of the sample limited the extent to which the influence of gender, qualification status and profession could be explored, as well as meaning that careful consideration should be given to generalisations drawn from the study.

Notably, there was a clear gender imbalance within the sample reported here.

However, there is evidence for a distinct gender imbalance within the sector of health and social care professionals. Previous NHS statistics have reported that the workforce comprises approximately 70-80% women depending on the Agenda for Change banding (NHS Employers, 2016). Furthermore, of the men and women working in the NHS, they are more likely to be working in certain professions; for example, female staff are less likely to be in post as doctors with only 5% of all female staff working as doctors or dentists while approximately 22% of all male staff are in this role. Statistics published by the Nursing and Midwifery Council, which maintains the register for nurses, nurse associates and midwives (and includes health visitors), showed that 89.31% of those on the permanent register in September 2020 identified as female⁶. Similarly, 81.73% of registered practitioner psychologists are female according to the Health and Care Professions Council statistics⁷. Therefore, given the professions most represented by the sample, the gender imbalance in the

⁶ As of the UK Data Tables downloaded from their website for the previous half tax year statistics. Retrieved from https://www.nmc.org.uk/about-us/reports-and-accounts/registration-statistics/

⁷ As of the registrant snapshot published on their website for November 2020. Retrieved from https://www.hcpc-uk.org/about-us/insights-and-data/the-register/registrant-snapshot---3-november-2020/

sample appears similar to that of the population from which it is drawn, rather than indicative of a bias in recruitment.

It is, however, of note that particular professional groups were better represented within this sample than others. The largest professional groups in the sample were health visitors, who made up 39.09% of the sample, and psychology or psychotherapy professionals, who made up 33.09% of the sample. This is likely to be due to recruitment relying upon two main methods: i) associations or professional bodies representing health and social care professionals disseminating the recruitment advert; and ii) snowball sampling via the researcher's personal contacts, in particular through social media. With regard to the first method, the Institute of Health Visiting agreed to send an email to its members with the sole purpose of disseminating the study recruitment advert, with a marked uplift in the numbers completing the study shortly after. Similarly, the British Psychological Society posted the advert on more than one social media channel. The second method also had some bias since, as a Trainee Clinical Psychologist, many of the researcher's personal or social media contacts were professionals working in similar jobs. Together these may have led to the higher representation of these professional groups in the sample. Nevertheless, there are a range of professions represented within the sample, but it is a limitation of the study that needs to be considered when generalising study findings, especially to those groups for whom few members took part. This is particularly relevant in relation to considerations of generalisability across both the health and social care sectors, since very few members of the social care profession were represented in this sample.

A further limitation is the operationalisation of SES in the study. Owing to the different life stages that the mothers of different ages would be expected to be at, it was not possible or realistic to use the same proxy indicator of SES for all ages. Instead, an occupational proxy was used for the older mothers, while an educational proxy was employed

for the teenage mother. This limitation is further compounded by the association of disadvantaged SES with young motherhood, meaning it is possible that professionals automatically represented a mother with limited socioeconomic means when presented with vignettes depicting the teenage mother. The possible impact of this limitation has been discussed throughout, however, the differing associations of age and SES, alone and in combination, with the judgements, ratings and responses given, including between the two teenage mothers of differing SES, indicate that teenage motherhood was not wholly conflated with disadvantaged SES.

At a more conceptual level, there is also a question about the extent to which using a vignette methodology, as was employed in the current study, has ecological validity. There is some debate as to whether attributions made in response to vignettes adequately replicate those made in real-life situations. For example, studies comparing the responses of care staff to vignettes describing behaviour that challenges with their responses when actually faced with that behaviour have reported greater emotion and negative judgement in the real-life situation (Lucas et al., 2008; Wanless & Johoda, 2002). The difficulties inherent in undertaking research using naturally occurring situations to study the current research question, including controlling confounding factors, precluded the use of such a method. Moreover, it is possible that these limitations found in the learning disability literature are different, since care staff typically have relationships with the individual showing behaviour that challenges and so ratings may be affected by the complexity of experience and knowledge arising from such relationships. The current study looked at initial or early contact with professionals at an early stage of potential cause for concern, rather than once the professional-service user relationship has developed. Nevertheless, these limitations need to be borne in mind during interpretation of the findings and when considering generalisability.

This latter caveat also relates to the possibility of a social desirability bias, in which professionals may have wanted to represent themselves as not showing a bias based upon the mothers age or SES. The possibility of such a bias was one of the reasons that the vignette methodology was chosen and employed, rather than undertaking a qualitative interview study asking professionals about their opinions and attitudes towards teenage mothers.

Furthermore, in contrast to Taylor et al.'s (2009) factorial vignette methodology, participants in this study were only shown one version of the vignette to limit the extent to which participants were likely to identify the manipulated variables of interest. To this end, limited information was also provided about the study aims, with participants fully debriefed about the variables of interest only after having provided their responses. Nevertheless, it is possible that participants had some idea about the study aims which may have influenced how they responded, especially for those seeing the teenage mother. However, it is likely that this would have resulted in attenuated judgements rather than enhanced it, meaning one could expect that findings may underestimate rather than overestimate the impact of maternal age.

Conclusions and Implications of the Study

Importantly, there was no evidence that young maternal age, either alone or in combination with SES, meant that professionals were more concerned for the welfare of the child nor any more likely to identify safeguarding concerns or suggest that an escalation of concerns to social services or early intervention input was needed. This is a key finding in the context of the previously reported fears among teenage mothers that accessing support may mean that they would be deemed unfit parents and even lose custody of their children (e.g. Action for Children, 2017; Home Start UK, 2019; Mental Health Foundation, 2013).

However, there was some evidence that initial impressions of the mother's parenting capacity were lower for teenage mothers. This did not appear to be solely due to factors such

as socioeconomic disadvantage or other stressors which may restrict the mother's parenting capacity, with young mothers also more likely to be assumed to have inadequate parenting ability or knowledge. It is possible that this represents some prejudice on the part of professionals, which may be what is perceived by young mothers when they report feeling looked down on or judged during interactions with professionals and services (Action for Children, 2017; Home Start UK, 2019; Mental Health Foundation, 2013; Harrison et al., 2017; Higginbottom et al., 2006; Lea, 2006; McDermott et al., 2004; Redwood et al., 2012; Ross et al., 2012; Yardley, 2008). Such prejudice is, perhaps, an expected consequence of professionals being part of a society in which teenage parents are stigmatised; however, it does suggest a need for professionals to reflect on this bias and how it may impact their work when encountering young parents.

One potential direct implication of this bias is that it leads to interactions in which young mothers perceive judgement and therefore affects the ability to build a rapport with or engage the mother. Feeling judged by professionals has been previously reported to be a key reason that young parents may be reluctant to access services (Home-Start UK, 2019; Ross et al., 2012; Norman et al., 2016). Furthermore, from the parent's side this may lead to young parents feeling they must prove themselves capable against the expectations of professionals, which Norman et al. (2016) suggested some parents may do by positioning themselves and their knowledge in opposition to the professional, with clear implications for developing cooperative working relationships. Alternatively, as Lea (2006) described, the internalised power imbalance and lack of confidence may mean parents defer to professionals and are reluctant to question or voice their needs or goals. In relation to both possibilities, it may be necessary for professionals to take extra time getting to know the young person and ensuring that they both give due weight to expressed concerns and opinions as well as proactively enquire about and attempt to elicit them.

A further possible implication of a bias towards assuming lower parenting capacity for young mothers is that this may influence professionals' expectations of what the parent and child can achieve; expectations of child development and parental behaviours may then be lower. A consequence of this may be that early signs of difficulty are not picked up as they are seen as inevitable and so interventions that may be best implemented early may not be offered. Alternatively, it may be that parenting interventions or support may be thought to be less likely to be beneficial and so may not be offered in the same way they are offered older mothers. One possible piece of evidence in support of this is that, despite inadequate parenting ability or knowledge being more commonly cited when the mother seen was a teenager, parenting education and support was not more likely to be recommended for teenage mothers than older mothers. Instead, steps to reduce stressors related to social capital, such as finances, were more likely to be recommended for the youngest mothers, despite not being identified any more frequently as a causal factor than they were for older mothers. This may suggest that professionals consider that changing external factors is more likely to be successful than interventions to enhance the mother's own parenting abilities.

Concern for the mother's own welfare was also greater for the teenage mother than for the older mothers in the vignette, although this difference was significant only in comparison to the oldest mother. However, this does indicate that professionals may have seen the teenage mother as more vulnerable. This may be due to a complex interplay of vulnerabilities or risk factors which the professional may associate with young motherhood. There was no clear straightforward indication of what this perception of vulnerability may be based on from the causes specified, with social capital and mental health not differing in the frequency at which they were cited by professionals, although social or family support was identified as potentially relevant by a greater proportion of participants when the mother was a teenager than when she was older. Given that there are greater associations between several

risk factors and teenage motherhood, either because of the prior association of these factors with likelihood of becoming a teenage parent or because of a greater risk of younger parents experiencing certain hardships, an increased concern for younger mothers may not be unwarranted. Disadvantaged maternal SES was also found to be associated with greater concern for the mother, suggesting that this may play a role in this finding, however, here was no significant interactional effect of maternal age and SES suggesting that increased concern for the teenage mother reflects a more complex range of factors than SES alone.

Conversely, the same influence of maternal age was not seen on the ratings of extent of concern for the child. It is possible the focus was drawn to the potential mental health of the mother as a main influential factor in the scenario described, including in the child's potential developmental delays, as a result of the increased risk of mental health difficulties among young mothers. However, information about the higher risk of mental health issues among young mothers was not provided and it is unlikely that professionals all had a detailed knowledge of the interactions of risk factors and difficulties for young mothers, especially since mental health was no more likely to be cited as a causal factor when the mother presented was 17 years of age. Furthermore, the negative outcomes that may be associated with young motherhood by professionals would also be likely to impact on the child and so if the mother was seen to be at greater risk, one may expect concern for the child's welfare to be similarly elevated. It is, perhaps, therefore also important to consider the suggestion in the SCR reports that professionals may become distracted by the mother's own needs, especially where the mother has complex difficulties or appears vulnerable (as may be the case for a teenage mother), and therefore miss some of the child's needs (Brandon et al., 2020). Nevertheless, it is important to highlight that, although concern for the child's welfare was not elevated, it was also not reduced compared to the concern for the child when the mother was presented as older. Consequently, this may simply support the idea that there is not a bias leading to increased concern for the child as a result of the mother being young.

Alternatively, if parenting capacity is understood to be lower, professionals may expect less in terms of child achievement or development and therefore may not perceive early indicators that would otherwise arouse concern for the child as informative. Without a better understanding of the reasons for greater concern for the teenage mother's welfare, it is not possible to assess this further. However, professionals would be wise, in practice, to reflect upon their reasons for feeling greater concern for a mother when mothers appear to have complex vulnerabilities in the absence of greater concern for the child in order to ensure that they are adequately attending to the child's needs.

Finally, there was a lack of significant influence of maternal age or SES on causal attributions and no evidence suggesting they can be understood as a mediatory factor in the relationship between these characteristics of the mother and the judgements and decisions made by professionals. Consequently, it is suggested that further research assessing causal attributions is of limited utility in exploring how maternal age and SES influences the way that professionals make sense of what is happening in situations such as the parenting situation described in the vignette. This limited the extent to which it was possible to tease apart the possibilities underlying the ratings of welfare concern and parenting capacity, although this was aided by the inclusion of open-ended qualitative responses. Future research should look to tease apart these possibilities to achieve a more detailed understanding of the complexity of factors included and activated in professionals' representations of teenage mothers and their subsequent impact on care provision.

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Appendix A

Recruitment Advertisement



We would like to invite you to participate in a short survey about how health and social care professionals make sense of and respond to situations involving mothers and their children. To take part you must be over the age of 18 and currently working in the health and a social care sector in the UK.

In total, it should take approximately 5-10 minutes to complete. As a thank you for your time, you will have the option to enter a £50 Amazon voucher prize draw.

To find out more or to take part please follow this link to the online survey: https://essex.eu.qualtrics.com/jfe/form/SV_8p35rqj0R1vlf4p

If you have any questions, please contact Dr Katie Manning at km17504@essex.ac.uk.

Appendix B

Information Sheet



Information sheet (16th October 2018)

Investigation of causal attributions and decision-making by health and social care professionals in parenting situations.

We would like to invite you to take part in this study. Please read the information on this page carefully before proceeding.

We are interested in understanding how professionals working in health and social care make sense of and respond to situations involving mothers and their children. The study should take you approximately 5-10 minutes to complete. You will be presented with a scenario involving a mother and her child and will be asked to answer a number of questions about the event described.

To take part you must be 18 years of age or above and currently be working in the health and social care sector in the United Kingdom.

You will not required to provide any personal identifiable information at any point in the survey. Your participation in this research is voluntary and you have the right to withdraw at any point during the study by closing your browser. However, since your responses are anonymous, it will not be possible to remove your responses once you have completed the survey.

As a thank you for taking part, you can choose to enter the prize draw for a £50 Amazon voucher by providing your email address at the end of the survey. Your email address will be stored separately from your responses and will only be kept until the draw has taken place at the end of the study.

This study is being undertaken as part of the Doctoral training programme in Clinical Psychology at the University of Essex. Ethical approval has been provided by the University of Essex Research Ethics Committee. If you would like to contact the Principal Investigator in the study to discuss this research, please e-mail Dr Katie Manning (km17504@essex.ac.uk).

At the end of the study, anonymised findings will be published in the form of a doctoral thesis and may also be published in academic journals or presented at conferences. Anonymised data will

also be deposited in the University of Essex Data Repository.

If you would like to take part, please continue to the next page where you will be asked to confirm a number of statements and that you consent to take part.

Principal investigator

Dr Katie Manning (Trainee Clinical Psychologist), School of Health and Social Care, University of Essex, Wivenhoe Park, CO4 3SQ, Colchester. Email: km17504@essex.ac.uk.

Supervisor

Dr Frances Blumenfeld (Programme Director, Doctorate in Clinical Psychology). School of Health and Social Care, University of Essex, Wivenhoe Park, CO4 3SQ, Colchester. Email: fblume@essex.ac.uk.

University of Essex Research Governance and Planning Manager

Sarah Manning-Press, Research & Enterprise Office, University of Essex, Wivenhoe Park, CO4 3SQ, Colchester. Email: sarahm@essex.ac.uk.

Appendix C

Consent Form

Consent

Please confirm that you agree with the following statements:

I have read the information about the study on the previous page.	O
I understand that I do not have to take part and that I can stop taking part at any time by closing the browser.	Agree
I know that I will not be required to provide any personal identifiable data. Therefore, my responses are anonymous and it will not be possible for them to be removed once I have completed the survey.	Agree
I confirm that I am over 18 years of age.	Agree
I am currently working in the health and social care sector in the UK.	Agree
l agree to take part in the study.	Agree

Please click next to begin taking part.

If you feel unable to agree with all the statements above, please close your browser now. Thank you for your interest in taking part.

Appendix D

Survey Presentation Example

Demographic information
Please select your gender:
O Male O Female O Non-binary O Prefer not to say
Please select your age from the list below.
•
Please select your profession:
Social Worker Midwife Health Visitor Mental Health Nurse Paediatric Nurse Adult (General) Nurse GP Psychologist Occupational Therapist Speech and Language Therapist -
If other, please enter your profession.
Are you qualified or a student/trainee in this profession? O Qualified O Student/Trainee
How many years experience do you have in this profession?
▼

Vignette Combination 1

Please read the following scenario and answer the questions below.

Emma is a 17 year old White British single mother, who is studying for her A levels at sixth form. Her daughter, Megan, is 2 years old. At Megan's two-year health check, concerns were raised about her development. Megan is small underweight for her age and appeared withdrawn. Megan does not yet appear to communicate verbally, with the exception of the use of the word "mama", and little interaction between Emma and Megan was observed. Emma reports that she has been struggling with low mood. She is tearful and describes finding daily tasks difficult and feeling overwhelmed.

teeling overwneimea.											
What causes or factors do you think are most likely to have influenced the situation described?											
										//	
Please think about the reason(s) you have written above. The items below concern your impressions or opinions of the cause(s) of the situation. Please select one answer for each of the following questions:											
Is the cause(s) something:											
	9	8	7	6	5	4	3	2	1		
That reflects an aspect of the mother	0	0	0	0	0	0	0	0	0	Reflects an aspect of the situation	
Manageable by the mother	0	0	0	0	0	0	0	0	0	Not manageable by the mother	
Permanent	0	0	0	0	0	0	0	0	0	Temporary	
The mother can regulate	0	0	0	0	0	0	0	0	0	The mother cannot regulate	
Over which others have control	0	0	0	0	0	0	0	0	0	Over which others have no control	
Inside the mother	0	0	0	0	0	0	0	0	0	Outside the mother	

	Stak	ole over t	ime	0	0	0	0	0	0	0	0	0	Variable	over time
Und	er the po	wer of o	ther ople	0	0	0	0	0	0	0	0	0	Not und power o people	
	About the mother		0	0	0	0	0	0	0	0	0	About of	thers	
Over which the mother has power		0	0	0	0	0	0	0	0	0	Over wh mother I power			
	Ur	nchange	able	0	0	0	0	0	0	0	0	0	Changeable	
Other people can regulate			0	000000		0	0	0	O Other people cannot regulate					
To what extent would you be concerned about the mother's welfare (wellbeing and safety)?														
Not at all 0	concerno 10	ed 2O	зО	40		5(5 O		6 O		70		Very o	10O
To what extent would you be concerned about the child's welfare (wellbeing and safety)?														
Not at all 0O	concerno 10	ed 2O	зО	40		5(Э	6 O		70		80	Very o	10O
Please rate your impression of the mother's parenting capacity?														
Very low 0O	10	20	зО	4	0	5(Э	60)	70)	8O	90	Very high 10O
What do you think the next steps or ongoing support plan for Emma and Megan should be?														
														//

Appendix E

Debrief



Thank you for taking part in the study. We appreciate your time and effort.

Now that you have completed the questions, we would like to give you a bit more information about the study aims.

At the beginning of the study we told you that we were interested in investigating how health and social care professionals make sense of situations involving mothers and their children. In particular, in this study we are interested in whether the age and social class of the mother presented in the scenario influences professionals' understandings of the causes of situations and judgements or decisions about the potential cause for concern and future steps. It was necessary not to tell you about the precise factors of interest at the beginning because it is likely that people would pay close attention to these factors if they were known and therefore respond differently.

Young mothers and their children may be at greater risk of a number of experiences that warrant professional service provision and support. However, evidence suggests that young mothers are often reluctant to seek support, fearing stigmatisation, judgement and subsequent unfavourable treatment by professionals.

Furthermore, statistics have shown that over 60% of serious case reviews involve mothers under 21 years of age (figures for 2009-2011, Department for Education, 2012). Several reasons for this are possible, including reluctance of the mother to engage with services as well as the possibility of different responses by services to events indicating possible cause for concern according to the mother's age or perceived social class. Different responses by professionals could arise because of distraction by the vulnerability of a younger mother or lower expectations of parenting ability.

Consequently, addressing this issue through greater awareness of the factors influencing how health and social care professionals make sense of situations involving young mothers is important, both for the wellbeing of young mothers themselves as well as for their children.

If you have questions, comments or complaints about the study, in the first instance please contact the principal investigator, Dr Katie Manning. If you remain concerned or feel your comment has not been address satisfactorily, please contact Dr Manning's supervisor. Contact details can be found below.

Your responses have been saved and you may now close your browser.

Principal investigator

Dr Katie Manning (Trainee Clinical Psychologist), School of Health and Social Care, University of Essex, Wivenhoe Park, CO4 3SQ, Colchester. Email: km17504@essex.ac.uk.

Supervisor

Dr Frances Blumenfeld (Programme Director, Doctorate in Clinical Psychology). School of Health and Social Care, University of Essex, Wivenhoe Park, CO4 3SQ, Colchester. Email: fblume@essex.ac.uk.

University of Essex Research Governance and Planning Manager

Sarah Manning-Press, Research & Enterprise Office, University of Essex, Wivenhoe Park, CO4 3SQ, Colchester. Email: sarahm@essex.ac.uk.

Appendix F

Ethical Approval

04 June 2019

DR KATHERINE MANNING 14 ST KILDA AVENUE CAMBRIDGE CAMBRIDGESHIRE CB4 2QB

Dear Katherine,

Re: Ethical Approval Application (Ref 18008)

Further to your application for ethical approval, please find enclosed a copy of your application which has now been approved by the School Ethics Officer on behalf of the Faculty Ethics Committee.

Yours sincerely,

Lisa McKee Ethics Administrator School of Health and Social Care

cc. Research Governance and Planning Manager, REO Supervisor

Appendix G

Statistical analysis of causes or influential factors (derived via content analysis) for which no significant associations were found with maternal age or SES

Maternal mental health or wellbeing. Maternal mental health or wellbeing was the most commonly cited category across all groups, irrespective of the mother's age or SES in the vignette. There were, however, some group differences according to the mother's age and SES. Specifically, the percentage of participants citing this factor increased as the age of the mother increased, with 84.95% of the group seeing the 17-year-old mother stating this concern compared to 91.36% and 95.05% in the groups seeing the 26- and 35-year-old mothers, respectively, meaning there was a 10.1% difference between the groups seeing the youngest and oldest mothers. For SES of the mother, the proportion citing this factor was 7.24% higher when the mother was working class (95.52%) to middle class (88.28%).

Additionally, there appeared to be a potential interaction pattern within groups presented with the 17- and 26-year-old mothers whereby the percentage of participants citing this factor was approximately higher for working-class mothers than for middle-class mothers (difference of 7.29% and 8.51% for 17- and 26-year-old mother groups, respectively), but not for the 35-year-old mother groups in which the percentages were similar between groups.

While present, these effects were not particularly large, with the main effect of the mother's age being greatest and most likely to represent a significant or meaningful effect. It was not possible, however, to explore any maternal age and SES interaction further using a loglinear analysis since the high proportion of the presence of this category across all groups, meant that more than 20% of the cells had expected frequencies less than five, which is associated with a marked reduction in test power (Field, 2009). Consequently, separate chi-square analyses were carried out to consider associations of both mother's age and SES in the

vignette with this category of influencing factors. These found no significant association for SES with this category, $\chi^2(1) = 1.43$, p = .302.

For the association with mother's age, there was a trend towards and very close to significance at the p < .05 level, $\chi^2(1) = 5.86$, p = .050, with a small effect size, Cramer's V = .146. Nevertheless, this did not reach significance and would certainly not survive correction for multiple comparison. Therefore, post-hoc comparisons were not conducted.

Consequently, the observed potential differences according to the mother's age and age and SES combination are not significant and there is no evidence of an association between age or SES of the mother presented in the vignette and whether participants identified maternal mental health or wellbe an influential factor in the situation described in the scenario.

Additional developmental or health issues in the child. A difference of more than 11.26% was found between those viewing the youngest mother (31.18%) compared to the oldest (42.44%) in terms of the percentage of participants suggesting a role for additional developmental or health factors in the child, with those presented with the 26-year-old mother in between the two (37.04%). For SES of the mother, the proportion citing this factor was 7.24% higher when the mother was presented as working class (95.52%) than when she was middle class (88.28%). Therefore, the percentage of participants citing this factor increased as the mother's age increased and was higher when the mother was presented as working than middle class, although these differences were not particularly large and may not represent a significant association.

For 'additional development and health factors in the child', a possible interaction effect was seen in which mother's SES was associated with this factor in the older mother groups only. Specifically, for 26-year-old mothers the percentage of participants citing this factor was 9.55% higher when the mother was middle class than when presented as working

class, with this difference almost twice as large again (18.13%) among those who saw the 35-year-old mother. For 17-year-old mothers, the percentages were very similar, and these were also similar to the proportions among participants viewing the older working-class mothers. It is possible that this represents an effect of SES that was not fully differentiated in the younger group due to the different proxies used and necessitated by the life stage possibilities of the mothers (A-level student versus teacher in the older two groups).

However, statistical analysis of these age, SES and interactive age and SES associations indicating that these differences were not statistically significant and therefore that these observed differences in percentages did not represent a significant or generalisable effect. Loglinear analysis identified no significant three-way interaction model (i.e. an interaction between mother's SES and age and whether or not factors related to additional developmental or health issues in the child were identified), with the model retaining no three-way effects, $\chi^2(2) = 1.60$, p = .449. Further the model retained no two-way effects either, indicating that the possible overall age or SES associations discussed above were not statistically significant, $\chi^2(5) = 5.41$, p = .368. In fact, the model retained only a single one-way interaction for whether this category was endorsed or not, simply reflecting that participants were more likely not to have cited factors in this category than to have done so. The likelihood ratio of this model was $\chi^2(10) = 10.55$, p = .393.

Mother's history. Mother's history was also more commonly reported as a possible cause or influencing factor by participants who saw the vignette with the 17-year-old mother, with the percentage of this group citing this factor (20.43%) higher than in those seeing the 26- or 35-year-old mother, which were similar at 12.35% and 11.88%, respectively. However, again, the magnitude of this difference was not especially great, with a maximum group difference of 8.55%. Overall, percentages identifying factors in this category were very

similar for those seeing the working- and middle-class mothers, indicating that these factors were not associated with likelihood of citing mother's history as an influential factor.

The proportion of participants citing factors relating to mother's history per vignette version suggested a potential interaction between the age and SES of the mother in the vignette. Specifically, percentages were highest but similar in both SES groups for the 17-year-old mother, and lower but again similar for both SES groups among those seeing the 26-year-old mother; in contrast the percentage was higher for the 35-year-old middle class than working class mother by 5.15% and a factor of 1.55.

A loglinear analysis indicated that these observations of potential differences were not statistically significant, retaining no significant three-way or two-way effects: $\chi^2(2) = 0.65$, p = .723, and $\chi^2(5) = 3.50$, p = .624, respectively. Once again, only a single one-way interaction was retained for whether this category was endorsed or not; this, again, reflectied that, overall, significantly fewer participants cited factors relating to mother's history than did not (partial $\chi^2(1) = 1.49.61$, p < .0001). The likelihood ratio of this model was $\chi^2(10) = 7.692$, p = .659.

In summary, there was no evidence for a significant association between the age or SES of the mother presented and whether factors encompassed by the mother's history category were identified as influencing the scenario described in the vignette.

Single mother. For single motherhood, as for age of parent, it is likely that this represented other factors for many of the participants citing it, and it was coded elsewhere accordingly when a clear elaboration was made, such as that being a single parent may mean greater stress or juggling of demands, or limited support because of the absence of another parent to provide emotional or practical support. However, where no such elaboration to the stated factor of 'single parent' was provided, it was coded separately.

This factor, unelaborated, was suggested most frequently in relation to the youngest mother (15.05%) compared to the groups seeing the older mothers (4.94% for the 26-year-old mother and 8.91% for the 35-year-old mother), with citation of this factor without further qualification being three times more common in this group than in the group seeing the 26-year-old mother (4.94%). No association with SES was apparent, either alone or in combination with age, with percentages per vignette citing this factor reflecting only a potential main effect of age.

Assumptions for loglinear analysis were not met, with expected cell counts of less than five in 1/3 of the cells; however, there was no evidence for any association of SES and age in interaction. Chi-square analyses were conducted to consider main effects of age and SES, confirming the lack of association between citing single motherhood as a factor and the mother's SES in the vignette, $\chi^2(1) = 0.05$, p = .842. There was a trend toward significance for an association with mother's age in the vignette, at the uncorrected level, but nevertheless this indicated that age did not significantly affect the likelihood of participants providing this reason, $\chi^2(2) = 5.15$, p = .075.

Safeguarding concerns. In contrast to many other codes, safeguarding concerns were identified by a higher proportion of the group presented with the oldest mother (21.78%), followed by those seeing the youngest mother (15.05%) with the lowest percentage of participants identifying these concerns in the group who saw the vignette with the 26-year-old mother (13.58%). However, this maximum group difference of 8.20% was not particularly great and unlikely to be statistically significant. Similarly, only a small difference of 4.25% was found between SES groups, suggesting no simple association between SES and whether factors of safeguarding concern were cited.

Considering the age and SES of this mother in the vignette in combination, for participants seeing the 17- and 35-year-old mothers, the proportion was 5.78% and 5.75% higher, respectively, when the mother was presented as working class, whereas there was no difference according to SES when the mother was presented as 26 years old. Again, the magnitude of these differences suggests they are unlikely to be meaningful or significant.

A loglinear analysis indicated that these observations were not statistically significant, with the model retaining no three-way or two-way interaction effects ($\chi^2(2) = 0.21$, p = .902, and $\chi^2(5) = 3.52$, p = .621, respectively). This confirmed the lack of significant associations between mother's age and SES, independently or interactively, with whether safeguarding concerns were identified as influential factors in the situation. The loglinear model retained only a single one-way effect, with a likelihood ratio of $\chi^2(10) = 7.27$, p = .700. Partial associations indicated that this was due to the fact that more participants did not endorse this category than those who did (partial chi-square for this category effect = 129,7, p < .0001).

Lack of access to services. The data did not suggest the presence of any simple association between either age or SES of the mother and whether factors in the lack of access to services category were cited, which was confirmed by chi-square ($\chi^2(2) = 0.88$, p = .665, and $\chi^2(1) = 0.002$, p = 1.0, respectively).

However, when considered in combination, the difference between classes was greatest (10.83% and a factor of 5.65) between SES groups among participants seeing the 26-year-old mother in the vignette, with this more commonly cited for the middle-class than working-class mothers, whilst the proportions were more similar for SES for the youngest and oldest mothers. However, assumptions were not met for loglinear analysis, with more than 20% of cells (50% in this case) having expected cell counts below five due to the low

overall proportion of participants identifying this factor all, meaning that drawing further conclusions from this data would be invalid.

Factors of no concern. This category was not frequently cited in general, and the proportion citing it was similar across all groups irrespective of the mother's age and SES or the combination of these seen in the vignette. Loglinear analysis could not be conducted owing to 50% of cells having an expected count below five, but would be unlikely to identify any interaction of interest given the data. Chi-square analyses (using Fisher's exact test due to the expected cell counts) confirmed the lack of influence of either age or SES alone, $\chi^2(2) = 1.08$, p = .663 and $\chi^2(1) = 0.18$, p = .76.

Stigma or fear of judgement as barriers to seeking help. Factors encompassed by the stigma or fear of judgement as barriers to help seeking category were, again, not frequently cited in general, and the percentage doing so was similar across all groups irrespective of the mother's age and SES or the combination of these seen in the vignette. Again, with 50% of the cells containing an expected cell count less than five, meaning loglinear analysis could not be used to confirm the lack of influence of age and SES in combination. However, chi-square analyses considering the influence of age and SES of the mother alone found no significant associations with this category, $\chi^2(2) = 1.33$, p = .524 and $\chi^2(1) = 0.00$, p = 1.00.

Attachment issues of unspecified cause. Finally, there was no evidence for significant simple or interactive associations between the age or SES of the mother presented and whether attachment issues (without further elaboration) were identified as influential factors. A loglinear analysis identified no significant three-way or two-way effects, $\chi^2(2) = 2.38$, p = .304, and $\chi^2(5) = 0.86$, p = .973. Only a singular one-way effect was retained, simply reflecting the significance of the increased likelihood that this factor was not cited than the likelihood that it was. The likelihood ratio of this model was $\chi^2(10) = 6.79$, p = .746.

Appendix H

Statistical analysis of next steps or support plans (derived via content analysis) for which no significant associations were found with maternal age or SES

Mental health support, assessment, or treatment for Emma. The percentage of participants suggesting plans within this category was lower for the youngest (17-year-old) mother than for the 26- or 35-year-old mothers (by 9.32% and 7.71%. respectively), which, in itself, appeared to be driven by the lower percentage when the youngest mother was presented as middle class (73.81%) than working class (84.41%), suggesting a possible main effect of age and interaction effect of age and SES. Overall, percentages for SES appeared similar, suggesting no main effect of SES.

A loglinear analysis model retained no significant three-way (mother's age x SES x whether or not mental health support, assessment, or treatment was recommended: $\chi 2$ (2) = 1.549, ns) or two-way interactions (suggesting no association between either mother's age or SES on whether or not mental health support, assessment, or treatment was recommended: $\chi 2$ (5) = 4.149, ns), with only one-way interactions found to significantly affect the model ($\chi 2$ (4) = 157.258 p < .0001). Furthermore, the only retained one-way effect retained in the model was that of whether (or not) mental health support, assessment, or treatment was recommended, which simply reflects the fact that participants were significantly likely than not to have suggested a plan within this category. The likelihood ratio of this model was therefore $\chi 2$ (10) = 9.620, p = .474.

Consequently, the observed potential differences according to the mother's age and age and SES combination are not significant and there is no evidence of an association between age or SES of the mother presented in the vignette and whether participants made

recommendations for next steps involving mental health support, assessment, or treatment for Emma.

Medical and developmental assessment and support for Megan. The percentage of participants recommending next steps within the 'medical and developmental assessment and support for Megan' category appeared broadly similar irrespective of the mother's age, SES or age and SES combination in the vignette (Table 3.21). There was one exception to this, suggesting a possible interaction effect between the age and SES of the mother in the vignette: among those presented with the 35-year-old mother only, the percentage making this recommendation was 15.14% higher when the mother was presented as working class than when she was presented as being middle class. It is, however, unclear why this would be the case theoretically. Moreover, a loglinear analysis indicated that this age by SES interaction on this category outcome was not significant since the model retained no three-way interaction (χ 2 (2) = 1.84, ns). In fact, the final model retained only the constant, with all two-way and one-way interactions also removed (χ 2 (5) = 1.342, ns; χ 2 (4) = 4.227, ns; respectively). The likelihood ratio of this model was χ 2 (11) = 7.042, p = .796.

This confirms that there was no significant association between either SES or mother's age on whether participants made recommendations for medical and developmental assessment and support for Megan (two-way interactions in the model). The lack of one-way interactions reflects lack of significant deviation from an equal chance of participants viewing each age or SES in the vignette, as well as the roughly equal chance of participants making or not making recommendations within this category since the percentages of participants doing so was close to 50%.

Childcare place/ activities for child's benefit. The data in Table 3.21 shows that the proportion of participants who suggested childcare placements or activities with the intention of aiding the child's development or stimulation outside of the parental dyad was greatest when the mother was 17 years old (22.34%) than when she was presented as older. However, this was only marginally higher (4.52%) than the proportion of participants advocating this plan among those presented with the 35-year-old mother (17.82%). This was lowest for the 26-year-old mother (12.50%), although again not vastly below that of the oldest mother, with less than 10% difference between all three age groups. There was no evidence to suggest that SES alone was associated with the likelihood of this recommendation being made, with these percentages similar for both SES groups. Additionally, percentages across age and SES combinations did not suggest any marked interaction effect between mother's age and SES on the likelihood of participants making this recommendation.

This lack of significant influence of mother's age or SES in the vignette, either alone or in combination, was confirmed by a loglinear analysis which identified a model retaining no significant three-way (mother's age x SES x whether childcare/activities for the child's benefit was recommended: $\chi^2(2) = 2.26$, ns) or two-way interactions, $\chi^2(5) = 3.29$, ns. Only one-way interactions were found to significantly affect the model ($\chi^2(4) = 127.62$, p < .0001) and, within this, only a singular one-way interaction was retained in the final model, which simply reflected the fact that participants were overall more likely not to make recommendations in this category than to make them. The likelihood ratio of this model was $\chi^2(10) = 9.68$, p = .469.

Escalation of concerns and early intervention. The percentages of participants suggesting next steps or plans which were encompassed by the 'escalation of concerns and early intervention' category were similar across all groups irrespective of the age, SES, or age and SES combination of the mother presented in the vignette, suggesting that age and SES did not have a significant influence on whether or not such recommendations were made,

either alone or in combination. This was confirmed by a loglinear analysis, which retained no three-way or two-way interactions ($\chi 2$ (2) = 0.30, p = .2, and $\chi 2$ (5) = 0.69, p = .994, respectively). Only a single one-way interaction was retained in the final model, for which the likelihood ratio of this model was $\chi 2$ (10) = 5.11, p = .883. The retained one-way interaction was for the presence or absence of this recommendation, reflecting that, overall, participants were more likely not to make a recommendation within this category than to make one, with an odds ratio of 1.57 (partial $\chi 2$ (1) = 13.664, p < .0001).

Attachment intervention. There was a 9.04% difference between the proportion of participants who suggested plans encompassed by the 'attachment intervention' category when the mother was 26 years of age in the vignette (15.00%) compared to when she was presented as 35 years of age (5.94%), with the percentage when the mother was 17 years old falling in between (11.70%). There was little difference between the two SES groups (middle class: 11.81%; working class: 9.52%). The magnitude of these differences appeared unlikely to represent a significant influence of either age or SES. Percentages for each of the vignette versions also suggested a lack of effect of these factors in interaction, although the percentage of participants suggesting attachment interventions was higher when mothers were presented as working class than middle class for both the 17- and 26-year-old mothers (differences of 9.42% and 6.45%, respectively) while there was a marginal difference (3.38%) in the opposite direction for the oldest mother.

It was not possible to conduct a loglinear analysis since assumptions were not met, with 25% of cells containing an expected cell count less than five. However, the magnitude of the difference between mother's SES within each maternal age group is not large and appears unlikely to be a significant effect. To consider associations between suggesting attachment intervention and age and SES alone, separate chi-square analyses were conducted for the maternal age and SES groupings. No significant association was found between either

the mother's age or SES in the vignette and whether attachment intervention was recommended, $\chi 2$ (2) = 4.09, p = .130, and $\chi 2$ (1) = 0.40, p = .559, respectively. Consequently, there is no evidence of a significant association between age or SES of the

mother presented in the vignette and recommendations for attachment interventions.