



Gendered Horizons:

Boys' and girls' perceptions of job and career choices

A report for the Agile Nation Project at Chwarae Teg

Final Report

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Foreword

Chwarae Teg was founded in 1992 to support women, businesses and organisations in Wales to ensure that women are able to make a full contribution to the economy and have the same opportunities in the workplace as their male counterparts. This research project was commissioned by the £12.5 million European Social Fund and Welsh Government funded project: 'Agile Nation' which is delivered by Chwarae Teg.

The Agile Nation Project supports women to advance their careers through an accredited personal development programme: Ascent and supports businesses to adopt modern working practices such as flexible and remote working through its Evolve programme. It also works with educators to raise awareness of gender differences in the classroom and Sector Skills Councils around the barriers preventing women from taking up non-traditional careers

This research project follows on from other work Agile Nation is undertaking in the area of non-traditional career paths and occupational segregation; linking with the Fair Foundations Programme. Fair Foundations helps educators understand gender from a child development perspective and explores the contemporary debates about gender stereotyping, educational attainment and equality issues in the classroom .It also follows on from the GOWS (Get On With Science) Project which was run in 2012 by Chwarae Teg and ContinYou Cymru. The aim of GOWS was to encourage children, especially girls and especially at Key Stage 3, to take an interest in science, supporting teachers and encouraging family members to become interested in science and to raise the profile of girls in science. This encouraged schools to include parents as positive role models in engaging young people and in particular, young women to take up a science career.

The findings of this research will form an evidence base to share with Welsh Government, Careers Wales and educators about what influences children and young people when thinking about jobs and careers and any differences between the two genders. This will be useful in knowing how to tailor services to meet the needs of boys and girls and what approach to take.

The report could influence future projects at Chwarae Teg and in particular, reinforce the need for support to primary schools; aiming to reduce stereotypical curriculum preferences which should, in turn, influence the take up of men and women of non-traditional career paths.

1 Introduction

1.1 Context for the research

Agile Nation is a project run by Chwarae Teg to promote gender equality, support the career advancement of women and their economic progression, and contribute to the reduction of the gender pay gap in Wales. The project is funded through the European Social Fund (ESF): Priority 3 Theme 3 of the Convergence Fund and uses Welsh Government targeted match funding. Agile Nation supports women through the Ascent programme, which provides management and leadership training for women. Agile Nation also runs Evolve, a programme for small to medium sized enterprises to develop and implement best practice diversity strategies. Women involved in these projects have said that their choices have led them into labour market situations whereby progression is difficult. Consequently Chwarae Teg is interested in finding out more about how women form their ideas about work and the labour market whilst they are still in education, and about how those ideas can be better based on robust information and an up to date appraisal of opportunities.

This research therefore addresses the core question; ***“at what age and how do children in Wales form ideas about work and gender?”*** More specifically the aims of this research project were to explore:

- how children in Wales form ideas about work and gender, and the ages at which those ideas are developed
- whether there are any changes in the types of career which young people consider in the ten years between the Foundation Phase (ages 3-7) and the age when young people make decisions about post-compulsory education options (14-16 years).

The Women and Work Commission (2006) reported that nearly two-thirds of women are employed in 12 occupation groups: the five ‘c’s – caring, cashiering, catering, cleaning and clerical occupations – plus teaching, health associate professionals (including nurses), and “functional” managers, such as financial managers, marketing and sales managers and personnel managers. By contrast, men are employed in a wider range of jobs. Two-thirds of men are employed in 26 occupation groups including more professional, management and technical roles than women. This occupational segregation has an economic implication because society has traditionally undervalued ‘women’s jobs’ which in turn has led to a gender divide in earnings based on the types of jobs men and women do. This segregation can lead to a presumption that men and women have different skill sets and that there are types of jobs which are best done by women those which are best done by men. Research has shown that the power of gender stereotypes to affect occupational perception, preferences and decisions is undeniable, and that left unchallenged these choices will perpetuate occupational segregation and its associated wage imbalance (Milward et al 2006).

The research links with the Welsh Government’s Child Poverty Agenda in that it raises awareness of opportunities that children and young people might previously have thought were unobtainable and seeks to understand at what age limits are placed on the opportunities available to boys and girls in order to raise aspirations. Understanding this will allow necessary interventions to be developed to tackle the stereotypes which force women

into low paid sectors and occupations, keeping families trapped in the cycle of poverty and low ambition. The research will perform a number of functions. Firstly by asking the questions of a range of individuals, including family and people in the wider community, the research begins to raise awareness of the key issues. Secondly, the research will provide insight from young people themselves which could help inform practitioners about how the children and young people they work with think about their futures. Thirdly, it will offer a focus for further policy development work at a national level.

The research was undertaken between September 2012 and May 2013 by research teams from the International Centre for Guidance Studies (iCeGS) at the University of Derby, and from the School of Education and Lifelong Learning (SELL) at Aberystwyth University. The Research team's combined expertise includes an interest and understanding of young people's career learning, decision making and progression, as well as in children's and early years' social development..

1.2 The research process

The research process comprised four key data gathering exercises. It commenced with a literature review of the most cited Welsh and UK research around the issue of gendered stereotyping, social and career development (see Appendix One for list of resources). This was undertaken in the early stages of the project and was used to inform the detailed design of the research.

Following this, a series of twenty stakeholder interviews was undertaken. Stakeholders represent a range of organisations who deal with policy, employer engagement, recruitment, education and play provision. The list of stakeholder interviewees is provided in Appendix Two. The interviews explored stakeholders' understanding and perspectives concerning the development of stereotypical views and what influences these. They were also used to identify examples of interesting practice that challenged gender stereotyping. Interviewees were offered the option of being interviewed in either Welsh or English.

A consultation of parents' views was undertaken using an on-line self-completion survey. This was distributed via a wide variety of networks. The survey asked questions relating to parents views of their children's awareness of gender work aspirations, and role models, and the extent to which parents thought that prevailing stereotypes should be challenged. The survey was open from February 1st to April 8th 2013, and was completed by 245 respondents. A profile of respondents to the survey is provided in Appendix Three and suggests that although the respondents are slightly biased towards professional females they nevertheless provide a thoughtful and valuable insight from parents of children of all ages across Wales. It should also be noted that many of the stakeholders interviewed as part of this research were also parents. Their responses often referred to their own children as well as their own professional spheres of influence. Where this is the case, their responses have been used to illustrate the findings of the research where this has been deemed appropriate.

Finally, case study work was undertaken in four areas with children, young people and their teachers and community workers. The four areas were chosen based on a sampling frame which identified areas across the four quartiles of economic prosperity using the Welsh Index

of Multiple Deprivation to ensure that the work was undertaken in areas that were both relatively affluent, relatively poor and places between them. Within those areas, secondary schools were identified that were broadly typical based on their value added scores. Schools were then approached to participate and once a secondary school had agreed, a feeder primary school was also invited to participate along with other local organisations. Within these settings, interviews were held with a total of 32 children aged between 5 and 7, and 35 young people aged between 14 and 16. Visiting schools also provided an opportunity to interview a small number of stakeholders (2 parents, 2 secondary school staff, 2 primary school staff, 1 youth worker and 1 careers adviser). Their views have been incorporated into the data gathered as part of the stakeholder phone interviews and the survey of parent. However, it is important to bear in mind that the sample size was small and therefore cannot give 'general' information about the stakeholder groups who were interviewed

This report presents the key findings from the data gathered throughout these activities. A document with full details of the research methodology is available on request.

1.3 Reporting

This report presents the findings from the research project using three areas of focus namely:

- The development of gender awareness
- The occupational aspirations of boys and girls
- Factors influencing young people's decisions

Throughout the document, a number of terms are used which require further explanation. The use of the term 'child' and 'children' refers to children between the ages of birth to 11 years. The use of the term 'young people' refers to children in the age range 11-19 years. Throughout the report three groups of children and young people have been used to analyse data. These are children aged birth to 6 years, children aged 7 years to 11 years and young people aged 12 and over.

The Foundation Phase refers to children aged 3-7 educated in Wales. The organisation of education in Wales has led to an Early Years and early Primary Curriculum where play-based and experiential learning are key aspects of learning.

1.4 The Research Team's acknowledgements

The research team is indebted to Chwarae Teg for their excellent guidance and support throughout the project. The team also wishes to acknowledge and offer our thanks to the many stakeholders, parents, and school staff who participated in the research and offered their insights and personal experiences generously and with great insight. Finally, particular thanks go to the children and young people who participated in the research, who engaged in the tasks they were set with genuine interest and enthusiasm, and who provided some fine examples of art which we have been delighted to use in this report. .

2 Literature Review

2.1 Introduction

There is a strong evidence base that a gender pay gap continues to exist within the UK and in Wales, for example the median hourly earnings of men in Wales (£9.88, measured between 2004/5-2008/9) were just above the overall UK median (£9.81), while median female earnings (£8.04) were only 82% of the UK median, giving a Wales gender gap of 19% in hourly earnings (WISERD, 2011). The causes of the gender pay gap are complex but one of the reasons suggested by the Women and Work Commission (2007) is that women are over-represented in occupational sectors which are associated with low pay. The Commission also argued that the seeds of occupational segregation can be sown during the early years of an individual's life. With these ideas in mind, this literature review presents some key theories and analyses the evidence base on how boys and girls form ideas about who they are, how they should behave and what they might aspire to be as they grow up.

2.2 Children's awareness of gender

The Equality and Human Rights Commission (2012) identifies gender as referring to socially constructed roles such as behaviours, activities and attributes. The terms 'man', 'masculine', 'woman', and 'feminine' denote gender. They identify gender identity as being the way in which an individual identifies with a gender category. There is a strong evidence base that children have well developed gender identities by the age of two or three (Kohlberg, 1966, Kuhn, 1978, Yee and Brown, 1984, O'Keefe & Hyde, 1983 Renold, 2005.) There is also evidence that gender identity becomes further reinforced as young people get older by the influence of family peers, school, community, society in general and the media (Marmion & Lundberg-Love, 2004, Sagebiel and Vázquez-Cupeiro, 2010).

As part of his six stage model of cognitive development, Kohlberg (1966) argued that sex-role learning is an early part of cognitive development and occurs in three stages. In the first instance children develop gender identity awareness (by age three) which means they know they are a girl or boy but don't understand that gender is constant throughout life. The second stage is gender stability where they know that their own gender won't change. The third stage (6-7 year olds) is when children become aware that whatever the person's activities or appearance their gender will not change and their basic gender identity remains constant. Levy and Carter (1989) further developed Kohlberg's ideas arguing that once children have a gendered identity they have an imperative to make choices that fit with their understanding of their own gender identity.

Researchers have also used Kohlberg's theory to measure the impact of gender identity constancy. For example Warin (2000), found that children who developed a strong gender identity at age five were more likely to exhibit stronger gender stereotypical behaviour as they developed. Francis (2002) argues that social constructs of masculinity and femininity cause young people to resist choices that do not match pre-conceived ideas of what is a male or female role and that boys are the least likely to challenge these norms. Halim et al. (2011) agreed that gender identity for girls can be more flexible. The argument is that as they get older, girls' gender identity develops through forming interpersonal relationships, intergroup relations and evaluating their individual place in society. Consequently girls learn that boys have more status and some chose to adopt more masculine identities to enhance their status. There is also a small body of research that looks at gender identity formation in

Wales. For example Yee & Brown (1994) based on Kohlberg's ideas using a sample of 128 boys and girls in four age groups (three, five, seven, nine years) found that gender differentiation in attitudes was marked from age five but that each gender viewed itself more favourably – girls more so than boys. Meanwhile Renold and Allan (2006) investigating Welsh primary school children's views on achievement and aspiration, found that girls demonstrated a tension between being 'bright' (academically able) and 'beautiful' (fitting a feminine ideal) causing less confident girls to downplay their intelligence in favour of being more popular.

2.3 Children forming ideas about work and career

De Botton, A. and Colacci (2009) in a classic piece on the subject of work, argued that we spend the majority of our lives in occupations often chosen by our unthinking younger selves. There is a long history and large amount of literature on how children start to form ideas about work and career. For example as early as 1976, Leifer and Lesser found that children as young as three can name occupations that may interest them suggesting that children are aware of the concept of work as an activity that adults do; around the same age they are building ideas about gender identity.

From career and educational psychology theory research, there is some evidence to suggest that young people are aware of work at a very young age and also start to gender stereotype work that is suitable for men and for women. For example, research by Trice and Rush (1995) found that children as young as four years of age were significantly more likely to choose occupations typical for their gender. As children get older their ideas about what work is, and what work can be done by men and women changes. Research undertaken in the United States by Walls (2000) established that children's conceptions of the six dimensions of work (a)time (training, preparation), (b) availability (positions, jobs), (c) earnings (pay, dollars), (d) physical (strength, stamina), (e) mental (thinking, knowledge), (f) status (respect, prestige), improved with increasing school grade. He also found that between the 9th and 12th grade (between 15 and 18 year olds), students were the most reflective about future job aspirations compared with students in earlier years and argued for the need for comprehensive career education to support the process at all age.

The idea that our thinking about jobs and career changes with age goes back to Super (1957, 1990) whose 'life-space theory' views career development as: the forming and implementing of self-concepts in career development. The self-concept is shaped by a person's preferences, skills, and interests and these are developed in five stages Growth (0 to 13 years), Exploration (14 to 24 years), Establishment (25 to 44 years), Maintenance (45 to 65 years), and Disengagement (64 years and onwards). The growth stages have been further divided into four stages (0 to 4 years), fantasy (4 to 7 years), interests (7 to 11 years) and capacities (11 to 14 years) (Schreuder & Theron, 1997).

Gottfredson's (1981) 'Theory of Circumscription and Compromise' also places the development of occupational choice in a social context where work, identity, gender, and prestige are all intertwined. The first process is one of Circumscription — ruling out unacceptable options based on their perceived fit with one's developing self-concept. The suggested stages of circumscription are: -

- Orientation to size and power (age 3–5). Children become aware that adults have roles in the world. They realise that they will eventually become adults and take on roles for themselves. .
- Orientation to sex roles (age 6–8). Children begin to categorise the world around them with simple concrete distinctions. They become aware of the more recognisable job roles and begin to assign them to particular sexes. They will start to see jobs which do not match their gender identity as unacceptable. .
- Orientation to social values (age 9–13). By now children have encountered a wider range of job roles and are capable of more abstract distinctions. They begin to classify jobs in terms of social status (income, education level, lifestyle, etc.) as well as sex-type. Based on the social environment in which they develop they will begin to designate some jobs as unacceptable because they fall below a minimum status level and some higher status jobs as unacceptable because they represent too much effort or risk of failure. .
- Orientation to internal, unique self (age 14+). Until this point circumscription has been mainly an unconscious process. As entry into the adult world approaches young people engage in a conscious search of the roles still remaining in their social space. In this process they use increasingly complex concepts such as interests, abilities values, work-life balance and personality to exclude options which do not fit with their self image and identify an appropriate field of work.

After circumscription has excluded options outside a perceived social and personal space, the next process is one of Compromise. In this stage, individuals may be inclined to sacrifice roles they see as more compatible with their self concept in favour of those that are perceived to be more easily accessible.

Whilst Gottfredson's is a contested theory, research continues to explore how young people include and exclude certain types of work from their thoughts. McMahon and Patton (1997) surveyed 55 young people on their perceptions of work and gender and found that from 4 years to 18 years old, the young people consistently presented gender-stereotypical perceptions of occupation with boys being particularly critical of other boys who demonstrated interests in non-traditional boys roles such as cookery. They also found that pre-adolescent girls had a more restricted choice of future career aspirations than boys of a similar age/male counterparts.

Other research has found that boys' aspirations emphasised possessions and money, whereas girls' aspirations people and that these aspirations hold true for all the three grade-levels studied (2nd (7-8 year old), 4th, and 6th grades (10-11) year olds) (Helwig (1998a) Francis (1998) argued that occupational aspirations of boys and girls is a consequence of social learning to generate "gender category maintenance". These ideas are closely linked to Bandura's (1986) 'Social Learning Theory' which has also been used to explain gender stereotyping of occupations where role models such as parents, teachers and other adults encourage young people to make gender-typical choices. For example, Stockard and McGee (1990) in a study of fourth-graders (9-10 year olds) about their preferences for 21 occupations found that gender was by far the highest predictor of preferred occupation by both sexes. However, these findings were challenged by Whitehead (1996) who found that while boys who had a sex-stereotyped view of subjects also maintained sex-stereotyped attitudes towards occupations and roles; with girls no association was found.

Interestingly Flouri and Panourgia (2012) in a study of the career aspirations of seven-year-olds found that at this age they were very ambitious with over 80% showing preferences to be managers, professionals or associate professional, however, both the boys and girls had preferences for traditional gender-stereotyped occupations e.g. girls said they wanted to be a hairdresser or a teacher and boys chose fire fighter and police officer. In addition, they could not be considered realistic, with the most popular choices being teacher, hairdresser, sports player, fire fighter, police officer, scientist, artist, actor/entertainer, animal carer, vet, doctor and builder. Similar findings were established by Butler (2005) who looked at the career aspirations of primary school children in Wales and found that the young people had ideas about career from age six but that they were both un-realistic and gender-stereotyped.

This is also supported by Eccles (2009) who argues that young children begin with vague notions about future career expectations based on societal norms and parental expectations but gradually with experience become more realistic as they develop interests, perceived abilities and individual characteristics and develop further as opportunities become available. Auger et al. (2005) found that young children aged 6 to 8 aspired to careers that were gender-stereotyped but the older children 10 to 11 years olds tended to aspire to occupations that were more socially prestigious and less gender stereotyped but that nevertheless each age group held unrealistic expectations.

Tinklin et al. (2005) found in a survey of 190 young people that although attitudes may have changed as young people get older, their behaviour is still fairly gender-typical with 22% of boys suggesting they had to do well at school as they would in time become the primary breadwinner contrasted with only 2% of girls. Hutchinson et al (2011) found that subject choices at Key Stage 4 attainment and subsequent progression into vocational and academic subject choices had distinct patterns between genders which were particularly pronounced in choices of vocational courses. Beck et al.(2006) argued that choices made at an early stage in young people's lives have considerable influence on an individual's career trajectory, often resulting in a reinforcement of labour market segregation. This was based on findings demonstrating that young people generally have a conservative approach to labour market possibilities which leads them to conform to stereotypical notions of what men and women do. This view was also represented in guidance from Estyn (2008) which argues that both girls and boys often make stereotypical choices of options and subjects at all stages and girls tend to leave school with lower career aspirations. This observation was reinforced by Polavieja & Platt (2011) using data from the Labour Force Survey who demonstrated that between 1994 and 2008 the more open aspirations of girls (aged 11 – 15) transpired to become more segregated occupational realities as they moved into the labour market.

Girls consistently have higher aspirations than boys while at school but this is not being translated into equal achievement after school and women still find their occupational choices limited, in comparison to men's choices (Schoon et al., 2007)). For example (Gadassi & Gati, 2009) asked young men and women aged 20 to 30 to list 5 to 10 suitable occupations and then list their career preferences based on 31 career-related aspects. They found that both groups expressed stereotypical career choices, but the implied career preference list showed a wider range of choices for men suggesting that the impact of stereotypes is more pronounced in women's than in men's directly reported career preferences.

However, in a literature review by Watson and Mahon (2005) (based on studies by Wahl and Blackhurst, 2000, Tremaine et al., 1982) argued that despite 30 years of research on occupational gender stereotyping there have been no conclusive findings and much of the evidence is contradictory.

The evidence presented so far suggests that as children develop through to their mid-teens their ideas about themselves as individuals with a gender identity, as well as their ideas about their potential roles in life, change and mature. Just as their early aspirations transform from fantasy jobs to ones that reflect reality, so their understanding about jobs and careers that can only be done by men or by women change to a more nuanced reality. Girls are more likely than boys to aspire to non-stereotyped job roles by the time they are in their mid-teens. Yet behaviours prove more stubborn to change with girls and boys continuing to make subject and other life choices that reflect stereotypes. The following section examines the potential role of a range of factors in challenging not just attitudes but also behaviours.

2.4 Factors influencing stereotyping attitudes and behaviours

2.4.1 Career related learning

In school, learning about career and career exploration does help young people to develop more sophisticated ideas about work. For example Hartung (2005) argued that although there is a dearth of research in this area, what does exist suggests that many children in the range of 10–12 years of age do engage in dynamic career exploration, and that this allows them to develop complex ideas about work and career. He then goes on to explain that children as young as the 3rd and 4th grade (8-10 years old) have been observed to show high levels of knowledge about career exploration and as they develop, use their interests and aptitudes to guide what subjects they study

2.4.2 Socio-economic background

Creed (2007) suggests that socio-economic background is the key variable in defining whether a young person is able to make good career decisions. He identified a range of factors associated with career maturity which included being older, being female, having a higher socio-economic background, being more able, having work experience, being more certain about your career path, and having more confidence and esteem. As many of these factors are associated with socio economic status and opportunities it is this which influences career related choices.

There is also evidence from the Equality and Human Rights Commission (Benetto, 2009) about the career aspirations of 14 to 18 year olds which found that socio-economic background was an important variable in the attitudes of young people towards their perception of the relevance of the subjects they were learning, their attainment at GCSE, and their fear of failure at school. The research also found however, that gender appeared to be a more important differential than social class in accounting for differences in career aspirations. Boys were more likely than girls to expect to work in engineering, ICT, skilled trades, construction, and architecture or as a mechanic. Girls were more likely to expect to work in teaching, hairdressing, beauty therapy, childcare, nursing and midwifery.

There is also a growing evidence base about the under achievement of boys at school (Pickering, 1997; Francis, 1999, Francis, 2002, Lloyd, 2011) which demonstrates that girls have caught up and passed boys in traditional male subjects such as science and maths but

boys still lag behind girls in English and Languages (Francis, 2002). Arnot et al. (1999) gave a possible explanation of this as being related to boys in working class areas which were previously dominated by heavy industry, not trying to succeed because of lack of opportunity to progress to work in traditional male occupations such as mining. This is partly supported by Pickering (1997) who found that boys were also the least likely to reflect and accept changes in the labour market, believing they will automatically find a job. Arnot et al. (1999) also found that girls' future aspirations had increased dramatically to equal and surpass those of boys. But as Weiner et al (1997) have pointed out, the superior educational attainment of females has not so far, been reflected in the representation of women at the most senior levels of employment.

In a study of college students Greenbank and Hepworth (2008) observed a number of characteristics of working class students which revealed their lack of awareness of what employers wanted, such as focussing on getting good grades to the exclusion of engagement in extracurricular activities. They comment that this reflects a lack of social capital in that they tend not to have easy access to advice and information from knowledgeable adults. Furthermore because they share this characteristic with their peers, this is not seen as a problem and consequently they tend not to seek out sources of information or advice that are available to them.

2.4.3 School infrastructure

Opportunity structure also plays a role in reinforcing or challenging stereotypical behaviour. Recent research of schools in England by the Institute of Physics (2012) found that almost half of all state schools in England do not send any girls on to study A-level physics. The research also found that girls in single sex schools were far more likely to study physics than mixed schools and this aversion to physics was not manifested in other sciences. This idea is partially supported by Francis (2003) who found that although girls in single sex schools did have a higher preference for maths than in mixed schools they maintained a strong desire to not study hard sciences. Although they had much higher aspirations the gendered nature of subject and career choice cannot be blamed on boys moreover it is socially embedded in issues such as gender, ethnicity and most importantly class. Evidence from economic theory also suggests that girls are more risk averse than boys which could lower their choices. For example, Booth and Nolen (2009) in an experiment to measure risk taking abilities in secondary schools, both in mixed schools and single sex schools, found that boys in either setting and girls in single sex schools were more likely to take risks than girls in mixed school.

2.5 Research in Wales about pupil choices

There is a small evidence base on the role of gender specifically relating to Welsh schools. Early research from McCarthy & Moss (1990) looking at choice of design and technology subjects found that it was dependent upon career choice and boys valued the subject more highly than girls. They also noted that girls in general perceived the study of technology to be more intellectually challenging. This view was supported by Woolnough (1990) who also found that boys had a more favourable view of technology than girls, who were more concerned about the potentially negative environmental impacts of technology.

Different views of subjects held by boys and girls were further studied by Jones (2008). In a study of post 16 mathematics choices by students in Wales Jones found that girls (aged 16-

17) had anxiety about mathematics, a lack of confidence in the subject and perceived low level enjoyment of mathematics and this combined with gender stereotypical career aspirations led them to reject maths in their post compulsory school options.

Hendley et al. (1995) used a larger study involving 4263 pupils in 34 schools aged 13 to 14 years old studying the national curriculum in South Wales. This study supported earlier research in finding that girls had a more positive attitude towards reading and writing than boys, whilst boys have a more positive attitude to and enjoyment in mathematics, science and technology than girls. The new findings for this research were that attitudes to speaking and listening in English showed no significant differences between boys and girls, whereas in science lessons girls have a more positive attitude to reading and writing than boys. However, they did find that none of the findings were consistent across all of the 34 schools surveyed – in other words the findings depend upon the context of an individual school.

There is also evidence that particular types of routes to work follow a gendered path. A study looking at options for studying apprenticeships in Wales and England found that in both countries young people had lack of knowledge of and held stereotypical opinions about apprenticeships both believing they were only for male-dominated, manual trades and the less academically gifted. Surprisingly only 9% of Welsh pupils compared with 20% of their English counterparts said they would consider a work-based training route. This idea is supported by modern apprenticeship research in Wales by Chwarae Teg (2005) for the Equal Opportunities Commission that found that both small and larger workplaces in Wales are more segregated than those in England and Scotland and pro-active strategies to alleviate this are having little impact.

2.6 Summary

The literature review provides a number of themes which are further developed in the report. These relate to three key themes; firstly the development of gender awareness and the literature suggests that:

- Young people learn that their identity is gendered from around the ages of 3 to 4 years old.
- Their gender identity remains constant as they grow older through to their teenage years.

The second theme relates to occupational aspirations of boys and girls:

- Young people understand that work exists and believe that men and women have different roles from a young age (3 to 4 years).
- Their ideas about what they might want to do as a job or career are expressed from a young age (3 to 4 years)
- Their preferences for gendered work roles are expressed from the age of 4 years old.
- Children's ideas about their future working lives are fantastical in their early years as they get older they develop ambitions based on their interests and abilities.
- Boys are more likely to express stereotypical job aspirations in their mid-teens than girls are.

The third theme relates to factors influencing young people's decisions and the literature has suggested the following key points:

- Stereotyping diminishes as children experience and learn more and is more likely to be challenged by 14 – 16 year olds than by children of primary school age
- Young people are risk-averse in their behaviours and will adopt stereotypical behaviours in their education and training choices.
- Socio-economic status or class has been used to explain under-achievement in white, working class males.
- Young people from more affluent socio-economic backgrounds are more likely to have access to information, advice, work related experiences and other career information to help them make more effective and informed career decisions.

There is little to suggest that young people in Wales demonstrate different attitudes or behaviours compared with those from other countries in the United Kingdom or the United States, although there is some evidence to suggest a relative lack of interest in work based training amongst Welsh young people.

Each of these themes is explored further using data and insight drawn from stakeholder interviews, parents' surveys and young people's perspectives.

3 Development of gender awareness

3.1 Introduction

The findings from a review of relevant literature suggest that:

- Young people learn that their identity is gendered from around the ages of 3 to 4 years old.
- Their gender identity remains constant as they grow older through to their teenage years.

The following section explores the extent to which the findings from the research support these assertions. The section considers the views of stakeholders, parents, children and young people which have been gathered throughout the research. A critical examination of these issues is important in understanding the extent to which influences inside and outside the home have an impact in generating gender stereotypical thinking amongst children. These findings have the potential to influence the approach adopted by both parents, educators and stakeholders in the wider community.

3.2 Stakeholder perspectives on the development of gender awareness

Stakeholders interviewed as part of the research confirmed that children develop gender awareness from a very young age. The responses from stakeholders did however vary depending on their contact with or experiences of working with very young children. Those who worked daily with young children reported that they thought that children realised that boys were different to girls from a very young age – between 18 months and three years. Most other respondents suggested that they realised this between the ages of 4 and 5. Several interviewees were careful to say that the age of realisation will vary dependent upon the family circumstances in which the child was raised. One suggested that a girl raised by a single mother might take longer to recognise differences between boys and girls than children raised in different circumstances.

One stakeholder suggested that this early view is developed and reinforced where children have older siblings of the opposite gender. One stakeholder suggested that parents behave differently towards their children depending on their gender from the moment of birth. Gender difference from birth is reinforced by the colours parents choose for their children's clothing (pink for girls and blue for boys), and the differences in the way parents speak to babies.

*“They come home from hospital and they are dressed in pink or they are dressed in blue and we treat them differently” **Primary teacher***

One stakeholder suggested gender identity can be reinforced from a very young age by the types of activities and clubs which children are taken to for example little girls may be taken to ballet classes (which are predominantly female) and dressed in very gendered clothing. Boys on the other hand are encouraged to mimic their fathers in their hobbies and behaviour.

“The clubs which they go to and other outside activities influence this. Some parents are very overtly that way inclined. Little girls do ballet. When there is a non-uniform day little girls can often be very dressed up. With dads and sons it is often the case that they are developing ‘mini-me’s’.” **Year 2 teacher**

Children's gender identities become stronger as they grow older however this is possibly due to their exposure to older children particularly in the secondary phase. One respondent said that they thought that it started from age 11 and that by the age of 14 – 16 young people were very aware.

“It is more pronounced from age 11 and going to high school. In primary they all muck in and they are all friends together. In primary they are going to school with very little children and there is more of an ethos of nurturing. Once they are at high school they are with adults. The difference is tangible. The role of male and female; who you mix with and who you talk to; this is all perceived differently amongst peers. If you talk to a boy there is a more pronounced reaction”. **Stakeholder**

Another agreed with this but said that as young people got older they were less likely to be swayed by expectations, they were more reflective and more experienced and more likely to think and behave independently.

Stakeholder participants were also asked at what age children recognised different family roles. Respondents indicated that children would be affected differently depending on their own context and that context could be both a negative and positive influence.

“their experience within their family will impact on how children see themselves and see other parents and adults which can be both negative and positive and obviously this can differ depending on the family circumstance and the community that children live in”. **Stakeholder**

Three respondents made the point that family roles are changing and that it is increasingly common for fathers to cook for example and take on childcare responsibilities whilst mothers work. They were keen to stress that it would be wrong to assume that all children experience a stereotypical upbringing, and that children will assume that their experience, whatever their upbringing is, is 'usual'. However, most respondents noted that most boys and girls are aware of different roles in the family and that this awareness is in place at some point during the Foundation Phase when children are between the ages of 3 and 7 years.

Findings from the literature review suggest that children's gender identity remains constant throughout their early years and begins to further develop once they reach their teenage years. The stakeholders we interviewed did not contradict this view; however one key observation made by this group was that gender became a more dominant concept affecting behaviour between the genders as children grew older. This was evident in observations of how children play in the playground. A number of stakeholders noted that at early age children of both genders played together however as children grew older a difference in behaviour became evident. As children grow older they drift into gendered groups. One stakeholder who is a secondary teacher as well as a parent noted that peer pressure is a possible explanation for this phenomenon.

“With my son, his best friend was a girl until around 10 or 11 and then they drifted apart. It might be peer pressure that causes this in terms of looking at relationships; they get labelled as girlfriend or boyfriend”. **Secondary teacher**

This was confirmed by a careers' co-ordinator and parent:

“Younger boys accept girls playing with them but at around 10 they become aware of gender difference and begin to exclude the opposite gender from their activities”.

Careers co-ordinator

3.3 Parents' perspectives on the development of gender awareness

Parents' responses were gathered largely through an online survey which generated 245 responses in total. The survey responses have been supplemented with data gathered through interviews with two parents in Monmouthshire and 5 stakeholders in the area who were also parents and contributed views on their own children's development. Respondents were asked to indicate whether or not they felt that boys' behaviour differed from that of girls. The majority (70%) indicated that they did feel that girls' and boys' behaviour differed. Table 1 below provides the full results to this question. This was a very small sample size of parents so no general conclusions can be made about these results.

Table 1: Parents views on the extent to which boys' and girls' behaviour is different (n=244)

Option choice	Total	Percentage
Yes	170	70%
No	69	28%
Other	5	2%
Total	244	100%
Nil responses	1	

Parents were offered the opportunity to add their own comments in response to the category 'other'. Although only 5 chose to do this the responses indicated a number of perspectives. One respondent indicated that all children behave differently because they are individuals. One respondent indicated that children behaved differently depending on their context. This was illustrated by a different respondent who indicated that children behaved in one way in the home but might be influenced to behave differently in society.

“Not in our household, but they are in society.” **Survey respondent**

Two respondents felt there were significant differences in the behaviour of genders, one suggesting that

“Boys more rough and tumble and girls are calmer and more compliant”.
Survey respondent

One parent interviewed as part of the fieldwork suggested that the gendered expectations and behaviour towards and of children was an issue for parents from birth. This parent, also

a teacher, whilst recognising in themselves their highly gendered behaviour towards their own children, found this to be inexplicable.

“You could start from birth and the way adults respond to babies. I would say as a parent that right from the start I have responded slightly differently to my son than I have to my two girls. Without even realise I am doing it. I sometimes ask myself why I say certain things to my children.” **Parent**

Parents indicated that the age at which children notice that girls are expected to behave differently to boys occurs across a range of ages during the pre-school years. Parents who had previously indicated that they felt girls behaved differently to boys were also asked to indicate at what age they felt their youngest child had exhibited this awareness. The majority (62% where n=152) said their child had become aware by the age of 3 years.

The responses from parents indicate a similarity with those from stakeholders, particularly those who have direct and regular contact with small children. These findings indicate that children become aware of gender before they start formal schooling however they may still be influenced by activities and role models from other pre-school activities such as those offered through playgroup or nursery.

One respondent indicated that their child viewed gender differently depending on the context.

“Around 5 for things like sport and dolls but older in respect of reading and cuddly toys.” **Survey respondent**

Survey respondent

The full results to this question can be found below in table 3.

Table 3: Parent views of the age at which their children thought boys and girls are expected to behave differently (n=152)

Answer options: Age (years)	Total	Percentage
0	5	3%
1	54	36%
3	58	38%
5	35	23%
Other	13	9%
Total	152	100%

One parent interviewed as part of the fieldwork suggested that gender difference can be reinforced by the toys which are both chosen for and by children. This finding was corroborated by the survey results where the majority of parents (81%) felt that toys sold in shops should be presented in a way which appeals to *both* boys and girls. The response indicated that some parents are highly aware of the potential for toys to influence behaviour.

“This can be stereotypically reinforced by toys. As a couple we made a conscious decision about this. It is our observation that girls gravitate at a very early age to pink

and pink plastic toys. Some parents refuse to allow their children to have guns or weapons but at the age of 5 our son was playing with a gun he had made from Duplo. One friend had a boy who liked playing with dolls but the Dad was clearly very uncomfortable with this. I think we transmit subliminal messages". **Parent**

One stakeholder noted that despite their best attempts to remove gendered toys from their child's play activities some children still drift towards gendered play. They also commented on the discomfort displayed by some parents when their child chose non-typical toys. This statement was not explored further for the purpose of this research.

Some recent research explores the nature of gender, toy choice, and their didactic content for 3 to 5 year olds (Francis, 2010). This research affirms that young children's toy preferences are highly gendered, with boys' toys and resources concentrated on technology and action, and girls' on care and stereotypically feminine interests. Furthermore, didactic information, and aspects developing construction and literacy skills, were identified in the selected toys and resources for boys, but were lacking in those for girls.

3.4 Children's' perspectives on the development of gender awareness

All five to seven year olds involved in the research had established views about gender. At a number of the primary school research sites, younger children's free play during break times and lunch time was, according to their accounts, highly-segregated by gender, with most of the activities they enjoyed being conducted within same-gender groups. At the Wrexham primary school the children were asked with whom they played, and the responses revealed gendered patterns of participation (and notions of competence) in some of the boys' favourite activities, particularly playing football. At this school the girls said they preferred to spend their play time skipping or playing hula hoop with other girls.

The preferences of the 5-7 Foundation Phase boys outside school were heavily dominated by sports, football in the main. Interestingly, the role of fathers in supporting and reinforcing boys' participation in sport was mentioned by several boys across groups.

"My dad goes swimming and I go swimming. I play hockey with my dad. Not hockey, golf." **Year 2 boy**

Foundation Phase girls gave examples of their out of school interests that included going for walks, playing in the park or art. One girl in the Caerphilly primary school, who wanted to become dance teacher, attended ballet classes. The discussion about ballet was greeted with protestations from the group's boys who were keen to stress their perception that ballet was an activity with highly-gendered connotations for them.

Children's views differed from those of stakeholders and parents in that children expressed gendered preferences in play activities from an early stage of their education whereas parents and stakeholders suggested that boys and girls were less segregated during play activities but that this became more pronounced as children grew older.

3.5 Summary of key findings –the development of gender awareness

Stakeholders suggest that children develop gender awareness and gender identity from a very young age and before they attend formal education. Gender awareness and identity may be influenced by informal pre-school activities.

The evidence gathered suggests that gender identity can be reinforced through the activities and clubs which children attend

Stakeholders observed that gender identity can be reinforced as children move into secondary school learning.

The organisation of the family is changing and the nature of family roles is also changing. Consequently the way that children understand roles within the family will vary depending upon their observations of their own families.

Children's gender identity remains constant throughout childhood however it can exert more influence on the way children play and associate with other children as they grow older.

The majority of parents think that the behaviour of girls and boys is different. However a significant minority (30%) thought their behaviour was not different.

The majority of parents stated that their children develop an awareness of gender by the age of 3.

Boys' out-of-school interests tend to be highly gendered and heavily influenced and reinforced by their fathers.

Play provides children with an opportunity to explore behaviours and girls and boys demonstrate some differences in the way they play together, and also the games they chose to play.

4 Occupational aspirations of boys and girls

4.1 Introduction

The literature review found that

- Young people understand that work exists and that men and women have different roles from a young age (3 to 4 years).
- Their ideas about what they might want to do as a job or career are expressed from a young age (3 to 4 years)
- Their preferences for gendered work roles are expressed from the age of 4 years old.
- Children's ideas about their future working lives are fantastical in their early years. As they get older they develop ambitions based on their interests and their abilities.
- Boys are more likely to express stereotypical job aspirations in their mid-teens than girls are.

This section examines the extent to which the findings from research with stakeholders, parent, children and young people supports the assertions from the literature.

4.2 Stakeholder perspectives on the occupational aspirations of boys and girls

Stakeholders were asked about the extent to which children understood about work and gendered roles in the workplace. Respondents tended to give one of three answers;

1. no answer at all – they said that they did not feel that they were the right person to answer the question or they did not know enough;
2. children are aware of a limited range of gendered roles between the ages 4 and 6; or
3. it is not until young people were at secondary school that they have a sense of what work is and that there were gendered expectations.

Some respondents said that at Foundation Phase, children were only really aware of work roles that they saw around them. One respondent working in disadvantaged communities gave the following example:

“Many of the families I work with have a lot of children. What happens is that the boys are allowed to go out to play while the oldest girls stay in to help mum. They think that this is the way it is supposed to be. Boys play and girls help around the home. This has always been a tradition” Stakeholder

Another commented:

“they're learning action and consequence as soon as they start to think and so you know, 'Mummy works hard, and Mummy's told me we work hard and we get money and then we have stuff', or alternatively you know 'Mummy works hard, but we never get anything any way so what's the point in working?', because there's no positive consequence to it, they're getting that all the time”. Stakeholder

Three talked about the fact that most teachers and teaching assistants in schools were female. One told a story that when a male friend started to work in a primary school all the children called him "Miss" because they saw that term as something related to occupation rather than gender. A careers teacher (also a parent) in a secondary school noted that this fact was compounded by the fact that there was gender segregation in primary schools in terms of seniority or roles and also in the specialisms which male and female staff adopted.

"Many primary teachers are women but the heads of primaries are often men. This reinforces that men are in power. Men in primary schools are often in charge of science or PE". **Careers co-ordinator, secondary school**

The roles of stakeholders therefore suggest that children are aware of the concept of work and jobs from a young age.

There was a roughly equal split between those stakeholders who said that they thought young people aged 14 – 16 years were aware of different work place roles and those that did not. Of those who thought that young people were aware of work place expectations several came from an industry background and saw how interest in their industrial sector was dominated by one gender. Sectors such as construction, land based industries and engineering struggle to persuade young women that there are good opportunities for them in their sector.

"Whilst girls may show more interest in finding out, they already have a perception that it's a male orientated environment and therefore not for them. And you know in some cases that perception is absolutely borne out by the breakdown of the workforce in that, you know it is a very male dominated work force". **Stakeholder**

In some cases this is due to structural factors. One interesting example was provided that relates to agriculture; in many Welsh farming families a system of primogeniture persists where the farm is handed on to the oldest son. This creates barriers to entry into agriculture for women who are not from farming families, and to some women within farming families. ∴

The seven respondents who thought that young people did not see a difference in work roles said that the reason for this was because young people did not understand what work was and therefore could not differentiate between expectations for different work roles. One respondent said that they thought there was a lack of understanding about different roles in industry,

"the understanding ofthe breadth of roles that there are in an organisation, so for example, you may well have that male dominated work force as far as the manufacture side is concerned but they won't realise that as part of that there may be a laboratory function or a quality control function that may well be a much more balanced workforce or even a very much a female type work force". **Stakeholder**

Three respondents who all work with secondary school and college young people, spoke in detail about the lack of realistic understanding about work, its rewards and employer expectations.

“I don't think that they are fully aware of what work actually is. I think when you speak to them they all want to have a massive wage immediately; they can't understand why they can't have it.... And I think again that's generation XY type of culture that the kids have got, so how do you then say “Well actually you need do this” and coerce them into a more appropriate way of thinking and path that they need to be making”. **Stakeholder**

Stakeholders were asked whether they thought that young people at key stage 4 believed that all jobs were available equally to boys and to girls. The majority said that they thought that young people did not think that there was equal access to jobs. One respondent gave their experience of attending careers fairs at schools;

“I attend careers fairs and things like that in schools; it's very interesting, you see the kids come in and all the boys will go to the boys-type things and all the girls will go off to the girls-type things which I find is quite a shame”. **Stakeholder**

Three respondents qualified their answers to suggest that gender was not the only, nor necessarily the main factor at play. So for example, one respondent referred to socio-economic background saying that disadvantaged young people were more likely to aspire to gender stereotypical job roles. Another said that girls were more likely than boys to think that all jobs were open to them.

“I have carried out a number of focus groups where we have discussed gender assigned roles and professions and over the last decade young people are increasingly aware that many doors are open. But, there is still a norm that certain boys or girls (within a group described as potential NEETS) will go towards a gender specific occupation.” **Stakeholder**

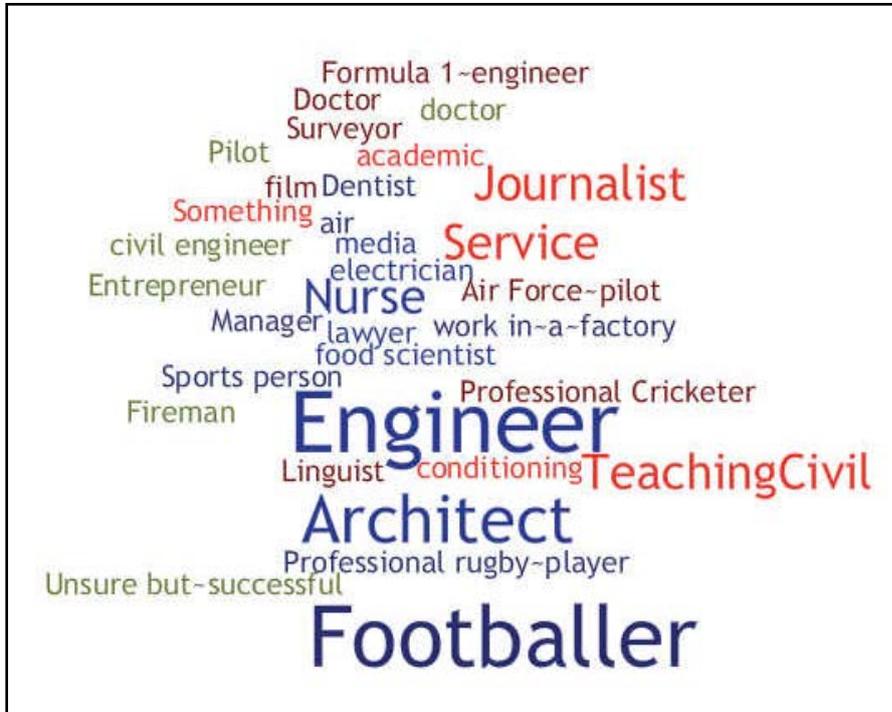
“as the years have gone by, girls are more aware that anything is possible....most girls know that everything is available such as jobs and courses in engineering. When my mum was 14 it wasn't done. Boys would know that routes are open but society stereotypes mean that they would be less likely to thrive in that role”
Stakeholder

“It is about getting kids from deprived areas to understand that they have the same opportunities as other kids. I am not sure how much gender plays in this. We are working with young women who have babies very young and this limits their potential or aspiration and we work with them to help them to re-enter the work force or training.” **Stakeholder**

4.3 Parents' perspectives on the occupational aspirations of boys and girls

Survey respondents were asked to indicate at what age their youngest children first indicated an interest in or aspiration in any career or role. The survey results (see Table 4) indicate that 20% of the respondents' youngest children had expressed an interest in future job roles between the ages of one and three. In comparison only 9% of eldest children had done so at this age. The data therefore suggests that first children tend to express an aspiration at an older age compared with their younger siblings. One explanation for this

Figure 2: Tag Cloud illustrating the early aspirations of boys who expressed a career ambition to their parents at age 8 (n=41).



4.4 Younger children's occupational aspirations

The research examined the knowledge, understanding and attitudes of children and young people regarding their understanding of work roles and career aspirations. The responses from the 5-7 year old participants align with the findings from other participant groups in the study. On a general level, the case studies revealed the tendency of many Foundation Phase children to define their career aspirations with reference to idealized, sometimes unattainable occupational categories such as sports stars, princesses and pop stars.

Figure 3: The fantasy career aspirations of 5-7 year olds



Footballer



Princess



Popstar

However, this was not the case with all pupils in the Foundation Phase classes we visited. Many of the 5-7 year old girls who participated in the research wanted to become nurses, teachers, vets and two girls in the Monmouthshire case study primary school wanted to become zoo keepers.

'I want to be a zoo keeper because I like animals. I went to a zoo and liked it. For my birthday I am going to get a chance to be a zoo keeper for the day. Testing out a job helps you know what it feels like'. Female year 2 learner

Figure 4: Non-idealised career aspirations of 5-7 year old girls.

These aspirations suggest the possibility that some Foundation Phase girls chose occupations linked to nurturing and nurturing professions, whereas some of the Foundation Phase boys who chose professions other than football or rugby, often did so on the basis of hobbies and interests. Examples provided included the jobs of geologist, marine biologist, or Police officer. One year 2 boy at the Wrexham case study primary school was asked what he wanted to become and why. He explained that he was interested in rocks and fossils and had linked this to becoming a geologist. On further investigation the boy had made the link between his interest in rocks and fossils to the job of geologist due to his mother's input.

“My mum told me about geology and she told me what it's all about and then I quite liked it and I started making my own fossil collection” **Year 2 boy.**

Likewise, the boy in a Monmouthshire primary school who expressed an interest in becoming a marine biologist had been encouraged in his interests through lessons in the curriculum about blue whales. This had stimulated his interest in jobs which involved finding out about animals in the sea. In both these examples, adults had helped boys draw links between their interests and hobbies and possible jobs

Figure 5: Non-idealised career aspirations of 5-7 year old boys.

4.5 Older children's occupational aspirations

By contrast the 14-16 cohort seemed to have well-developed ideas about attainable, realistic occupations that were open to them, and the learning pathways they needed to take to realise their aspirations. The aspirations expressed by the older cohort were less bound by gendered expectations, and included a girl in one secondary school who wanted to become a civil engineer and a boy who wanted to study and teach English literature. Below are two word clouds visually representing the occupations or career pathways cited by the young people, divided by gender:

Female 14-16 Participants' Aspirations



Male 14-16 Participants' Aspirations



The first point to note is that the young people generally had clearly-developed ideas of their occupational aspirations, and had set out clearly-defined pathways of training and Higher Education that they were planning to undertake in order to fulfil these. Also, immediately noticeable is the preponderance of many learners, both girls and boys, to favour teaching as a career. The reasons cited for this were largely to do with having experienced teachers who had inspired their own learning. However, interestingly, the gender of the teacher was in a number of cases not the same as the pupils that they had inspired to join the profession:

“Primary school was like the best years of my life and I loved my teachers so I’d love to be able to do that [. . .] [My former primary teacher] made learning fun and he did it through games and was just a nice person, and you get some teachers who if you don’t do what you’re told then you’re not learning. But if you didn’t do it another way, he’d find another way for you to learn”. **Female Yr. 10 student**

Clearly, girls are interested in a wide range of occupations, but do show a slight tendency towards ‘creative’ subjects and occupational pathways. Psychology was also cited by a number of the 14-16 female participants, which is of course a female-dominated field, with over 80% of undergraduate students of Psychology being female (Trapp et al., 2011: 19).

Typically, many of the boys tended towards science subjects, engineering and active and traditionally male-dominated sectors such as the army and outdoor activities. In the Caerphilly school, two of the boys were interested in Drama, although it is possible that this is partly a product of this school's well-established strength in the creative arts. Girls from the same school also cited this.

4.6 Summary of key findings - the occupational aspirations of boys and girls

Stakeholders suggest that in Foundation Phase age children understand that jobs and work exist. Their understanding of work is shaped by their experiences and observations.

Furthermore the workplace is complex. Some young people understand it fully, but others demonstrate a lack of basic knowledge and realism in their views of the workplace.

As children get older their awareness of availability of opportunities becomes more sophisticated. Nevertheless, many young people are unaware about what work roles are. Stakeholders think that young people do not think that there is equal access to jobs, but they say that girls are more likely to express views that they think that all jobs are open to all people.

The position in the family affects the age at which children first express an aspiration. Youngest children do this at an earlier age than the eldest child.

While still at primary school age children express a range of job aspirations to their parents, often reflecting the jobs they see around them, alongside fantasy roles. The jobs they cite are varied, although the most frequently expressed aspirations conform to gender stereotypes.

The children aged 5 – 7 years that participated in this research expressed a range of career aspirations including both fantasy and 'realistic' job roles. There was an observable tendency among girls to express aspirations aligned to nurturing, whilst boys often aspire to jobs which are linked to sports or hobbies and interests.

Young people aged 14 – 16 expressed career preferences that were varied and attainable although still including some glamorous job roles. Many said they wanted to teach. Stereotypical choices were expressed with girls favouring psychology and boys favouring science or outdoor careers.

5 Factors influencing young people's decisions

5.1 Introduction

The literature review found that

- Stereotyping diminishes as children experience and learn more and is more likely to be challenged by 14 – 16 year olds than by primary school aged children.
- Theories of Circumscription and Compromise suggest that young people are risk-averse in their behaviours and will adopt stereotypical behaviours in their education and training choices.
- Young people from more affluent socio-economic backgrounds are more likely to have access to information, advice, work related experiences and other career information to help them make more effective and informed career decisions.

However, as the research developed it became clear that simply to focus on age and socio-economic would exclude other contextual factors which underpin young people's decisions. Therefore this section investigates a broader range of factors which underpin and influence young people's decisions. These are discussed in this section of the report under the following headings and as previously we present findings for each from the stakeholders, parents and children and young people:

- school infrastructure, curriculum, and pastoral interventions,
- family and community interventions,
- gender
- socio-economic factors.

In terms of socio-economic factors, the Case Study local authorities allowed the research team to gain an insight into differing experiences across Wales. One of the key considerations in developing the sampling frame was to compare and contrast the experiences of pupils from various socio-economic backgrounds, given that some literature suggests that socio-economic status exerts an influence of students' ability to make informed and effective career decisions, and potentially influences women's likelihood to consider occupational sectors and career pathways that are not traditionally associated with their gender (Creed, 2007; Benetto, 2009).

Two of the Case Study authorities (and the schools therein) could be considered affluent (Monmouthshire and Wrexham); one could be considered among the most deprived in Wales (Merthyr Tydfil) and the Caerphilly schools, although they are situated in a relatively deprived local authority area, fall above the local authority mean percentage for Free School Meal entitlement, which is often the case with Welsh-medium schools (a trend that has been well-documented and much-discussed (Gorrard, 1998) but the reasons for which are beyond the scope of this report).

5.2 Stakeholder perspectives on factors influencing young people's decisions

The findings from the research note that both stakeholders and parents identify the most important influences on Foundation Phase learners' perceptions on work and career to be teachers and family members. Family and role models continue to be important throughout the school career of young people however as children become older a wider range of influences such as peer pressure and popular culture as experienced through the media are seen by stakeholders as very important. It would seem therefore that both family and schools share opportunities to challenge stereotypical thinking and to stretch imagination and aspiration throughout children's and young people's development.

5.2.1 School infrastructure, curriculum, and pastoral interventions

Most stakeholders agreed that it was important to challenge gendered career thinking however there was no consensus about when challenging gendered career ideas should start. Some stakeholders suggested that it should start in the Foundation Learning stage, or "as early as possible", others thought that it should be done early in secondary school. Some emphasised that all young people's choices should be challenged and that their decisions should be made on the basis of a well-informed and reflective thoughts and discussions.

The literature indicates that stereotyping diminishes as children experience and learn more and is more likely to be challenged by 14 – 16 year olds than by primary school aged children. This assertion suggests therefore that career awareness and resistance to career stereotyping is an issue which can be educated.

Recommended PSE curriculum good practice guidance in Wales recognises the need to begin career learning at an early stage. Career learning can be incorporated into many aspects within the primary curriculum without emphasising the need for children to make firm career decisions at an early age. Opportunities to help children through taught and experiential learning exist in a variety of contexts. The role of experiential learning in the secondary phase was highlighted as crucial in supporting non-gendered career decisions.

"if you can give a young person, male or female, a taster, or advice or information, knowledge about the different roles out there I think the choices will not necessarily be gendered chosen, but more of their strengths and what they enjoy doing."

Stakeholder

One stakeholder explained that a programme in the Foundation Phase called 'People who help us' is aimed at combating stereotypes but this topic offers an ideal medium for conveying strong messages about the role of work, aspiration and ambition. Observation by researchers during the fieldwork in Welsh primary schools noted display materials about famous Welsh people which described career routes and progression. One primary head teacher noted the importance of mini-enterprise in helping children understand about the world of work

"We use mini enterprise activities in school where we suspend the curriculum for the day. The class teacher acts as the chief executive and the children all have a role to play. The children have to apply for jobs depending on what they feel their skills and interests are. This is a good way of helping small children to understand about roles in work". **Head teacher, primary school**

Some stakeholders were also quite critical of the education system. For example those who represented employer groups commented on the limited understanding of the world of work of young people and their relative lack of employability skills.

“The challenge is to get kids to realise that actually there are very few roles which are gender specific - teachers don't know what opportunities are out there – Careers Wales does a great job but they can really only scratch the surface – we really need a culture change”. **Stakeholder**

“We have observed that the kids aged 5 to 7 are being pigeon holed even at that early stage. They are not being challenged in their thinking by their parents or by their teachers. For example when we go into school we tend to work with Yr4 and above. We say we want to do group work and we have to specify that we want mixed groups – they have a tendency to organise kids into groups of boys and groups of girls”. **Stakeholder**

There are a number of employer-driven projects which have been seeking to address some of these shortcomings by working with schools and teachers. Those that were mentioned throughout the course of the fieldwork included a range of activities organised by Business in the Community who have two STEM Agenda Forums which share and develop good practice among companies such as Sharp, Scottish Power, Airbus and Magnox. There was also a project undertaken in partnership with Chwarae Teg whose aim was to encourage girls to continue to study science by addressing the way that it was taught by their teachers:

“It's still a relatively new programme but certainly the feedback from teachers is that it's making them think in a way they haven't thought before by the fact that they have to consider what they are doing in Science, how they are being inclusive and not by mistake excluding girls..... what we need is a continual drip feed”. **Stakeholder**

Another project based in the construction industry provided courses that were for women only:

“we do run courses that are only for girls and market them as such and then women do come on those, but it's a rare woman who's got no construction experience that will come on one of our regular courses. They come on the course that is marketed as being girls only, and then once you've got their confidence up, they realise that they're completely capable, then they'll go on the other courses, and they're fine because they feel like they're not going to [be?] laughed out of the room because they already know some stuff”. **Stakeholder**

Career learning, work experience and work-related learning can play a crucial role in helping young people in the secondary phase to shape their career decision making. The research has indicated that young people have little understanding of gendered roles in the workplace

however effective work experience activities can be used as a vehicle for young people to explore the roles, rewards and aspirations of men and women in the workplace.

Stakeholders emphasised the need for educators and employers to liaise and plan work-related activities in order to ensure that employers are helped to

“Understand the things that they do that may kind of perpetuate the gender and equality thing”. **Stakeholder**

This would also help to ensure that young people understand how local labour markets operate and the opportunities that exist both within their own travel to work area, but also nationally and internationally. A recent report has suggested that there is significant mismatch between the career ambitions expressed by 13-18 year olds and the likely future availability of jobs in those areas (Mann et al, 2013).

The need for schools to work with industry partners was further highlighted as a useful way of identifying girls who have an interest and an aptitude in non-stereotypical occupations and then introducing them to the work-place. This would be in order to encourage them to consider a broader range of subject and career options.

Stakeholders noted that important and effective career curriculum interventions in secondary school included the need to learn career-related knowledge and understanding as well as aptitudes and attitudes such as confidence building which are required by young people who wish to extend their career decisions beyond the social norm. Whilst knowledge and understanding are important, stakeholders regularly talked about the need to develop positive attitudes to work and study, emphasising that there is no substitute for hard work and commitment. A number of stakeholders noted the importance of coherence and integration of career learning across the entire curriculum. This can be very important in helping learners develop an understanding of transferrable skills.

5.2.2 Family and community interventions

Although stakeholders did not identify specific extra-curricular and community activities which were helpful in shaping children and young people's career aspirations, many stakeholders asserted the importance of challenging gender stereotyping and suggested a range of community based actions which could be adopted. These included

- Training play workers to challenge gender stereotypes through play;
- Use residential activities provided through clubs to challenge gender stereotyping through shared chores and responsibilities;
- Engage community liaison officers to support activities which challenge stereotyping;
- Provide gender specific learning and play environments in order to engender confidence

Role models were seen as a very important influence in the way children and young people perceived work and career along with aspects of social behaviour. For children in Foundation Phase, the respondents said that their role models were those people around them, their family, their teachers and people in the community that they have social contact with. One respondent summed this up:

“When you are little, up to the age of six your parents are your idols, your heroes, they’re the ones that look after you, it’s a normal animal-human reaction. After six, they are influenced a lot by the society around them, the other parents” Stakeholder

There were several respondents who noted the very positive impact that role models could play:

“A very positive role model can shape a person’s thinking but then maybe they could aspire to do something they might not have thought of anyway and certainly I think there is a gender impact in that”. Stakeholder

One stakeholder noted that the number of girls enrolling on a land-based engineering course at a local college had suddenly increased and ascribed part of the reason to that being that the college had recently appointed two female tutors who were positive role models to the young people applying for the course.

The discussion about the influences and role models of young people in key stage 4 was very different to that for Foundation Phase age children. Whereas respondents generally said that parents and teachers were the main role models for the younger children, they gave a much wider and more varied response for the older group. At this age only two respondents said that family was the most important influence whilst a further two said that people in the family, including older siblings and those in the wider community, such as youth workers, sports leaders and extra-curricular activity leaders were the most important influences.

Whilst stakeholders were unable to confirm the age at which children began to express a personal preference or an idea about what they might want to do when they grow up they did suggest that children have a range of influences on the way they develop perspectives of work and career.

The key influences on children in Foundation Phase were said by most respondents to be family and teachers. In addition, two respondents spoke of the wider social influences of the people around them and two talked of the influence of TV:

“You will get some 4 year olds who are very au fait with Jordan and Girls Aloud but others who’ve been completely sheltered from that side of life, so again it could depend on the culture they’re brought up in”. Stakeholder

An employer-based stakeholder reported about a project which was run by a construction company, primarily as a way to build community good will during disruption caused by major construction works. The company employed a community liaison officer whose role was to invite community groups to the site to see what it involved. They said that all sorts of people came on to site including primary school children, secondary school and community groups (including 21 Women’s Institute groups). They were able to demonstrate the variety of tasks involved in construction including ecological work alongside the engineering such as the measures they were using to support the local wildlife, and how they filter water using straw.

So while the project was not about careers, in effect it demonstrated to community groups a range of attractive ways to engage people in engineering.

One stakeholder said that children were influenced by the toys they play with and three respondents talked again about the importance of role play at the Foundation Phase; that it was through playing and acting out scenarios that children come to understand how their families and the wider society operate and the roles that they are expected to play within it. Respondents stated that it was this social context that determined whether or not children understood there to be different expectations for boys and for girls. Seven respondents said that their children did not think that there were gendered work roles at the Foundation Phase. For some it was because their family situations were non-stereotypical, with neither parent working, with a single parent household or with the mother worker or having a non-stereotypical job. Others thought that young children simply did not know enough about work.

5.2.3 Gender as an on influence young people's decisions

Sixteen of the stakeholders thought that gender was a factor that influenced the choices of young people in Key Stage 4. A further two said that it was possibly a factor albeit one that was less prominent now than thirty years ago. There were different views amongst stakeholders concerning whether boys were more likely to challenge gender stereotypes in their thinking than girls. There was agreement that only a minority would challenge the norms, however, some thought that boys would be more likely to make a transition into hairdressing or childcare for example than a girl would into engineering. This was a view which was contested by a minority of stakeholders who felt that boys were actually more likely to face resistance if they were in a 'female' job role (such as a district nurse), than girls would in a 'boys' job role. The common view from industry was that once girls had decided to embark on a course of learning, apprenticeship or job role in a male dominated industry they would often excel – either because they had to be as good as the best boy to secure opportunities, or because they were driven individuals and part of their motivation was to 'prove people wrong'.

One respondent emphasised the influence of peer group pressure and gave the story of a group of girls at a career learning event where the most popular girl wanted to be a hairdresser.

“The other girls who had other ideas at the time, they all changed what they wanted to do after being together for a couple of hours, they all wanted to be hairdressers, so peer pressure has a lot to do with it”. Stakeholder

5.2.4 Socio-economic factors and young people's decisions

Stakeholder interviews suggested that the links between socio-economic background and career choice are complex. Economic deprivation was often linked to the increased incidence of single parent families and high levels of unemployment. These combined to offer a lack of suitable role models for boys in particular. In areas of high deprivation role models outside the home were seen as very important in supporting children and young

people's personal development. When asked who role models were for children and young people in the area this stakeholder responded:

"I would like to say parents. In more deprived areas however it is more likely to be youth workers, community workers or teachers. For some it is their parents".

Youth and community worker

In areas of high deprivation a lack of opportunity was also seen as a negative influence on children's and young people's aspirations and career decision making.

5.3 Parents' perspectives on factors influencing young people's decisions

Parents' views were largely gathered through an online survey which did not specifically explore the extent to which school structures of curriculum affected gendered thinking however a number of questions provide an insight into the extent to which parents support the idea that girls and boys should be challenged to consider non-stereotypical career decisions.

5.3.1 School infrastructure, curriculum and pastoral infrastructure

Respondents were asked to indicate their attitude to challenging gendered career thinking. The responses indicate that the majority of parents believe that it is either useful (32%) or crucial (44%) that both boys' and girls' gendered career thinking should be challenged. Parents indicated that no emphasis should be placed on challenging the stereotypical career thinking of one gender more than another.

Table 5: Parents views on the extent to which gendered career choices need to be challenged

Answer options	Total	Percentage
It is useful to challenge stereotypical career thinking by boys and girls	75	32%
It is crucial that we challenge stereotypical career thinking by boys and girls	105	44%
It is more important that we challenge stereotypical thinking among boys than among girls	15	6%
It is more important that we challenge stereotypical thinking among girls than among boys	10	4%
It is pointless to challenge stereotypical career thinking by boys and girls	0	0%
I have no views about this	16	7%
Nil response	17	7%
Total	238	

Engagement in science and maths learning is an important policy question, which Agile Nation has been engaged with through their STEM (Science, Technology, Engineering and

Maths) related activities. Two questions in the parent survey sought to discover the engagement of girls in science and engineering related activities. 47% of parents agreed that girls are no less interested in science and engineering than boys. Furthermore, the majority of respondents indicated that girls should be encouraged to have an interest in science and engineering (79%) with only 10% of respondents to this question disagreeing.

Additional parents' responses indicate the importance of challenging young people by encouraging them to consider jobs which might be traditionally have been thought usual for the opposite gender. One parent expressed a concern about the extent to which this needed to be done.

“Yes gender does need to be addressed and this usually takes place through PSE. They do look at traditional roles and society and whether this is still valid”.

Parent secondary school

The potential of face to face careers interviews also offers potential to challenge stereotypical career decisions on an individual level. According to a key stakeholder, universal access to in-depth career guidance is no longer available for all young people in Wales. Furthermore any work that they used to undertake in primary schools around challenging views of STEM occupations and opportunities has also been discontinued due to funding changes. Revisions to the way career guidance is organised in Wales has resulted in the provision of face to face guidance by trained professionals being limited to those young people in the greatest need or at risk of becoming NEET (Not in employment, education or training). One parent expressed concern about this new arrangement.

“There should be more attention given such as through careers interviews for all and not just the borderline students. The assumption is that because they are bright they can do it all for themselves. An interview would help them to think about holiday jobs which will help them when applying for future jobs. It would provide them with neutral advice” . Parent, Monmouthshire

5.3.2 Family and community interventions

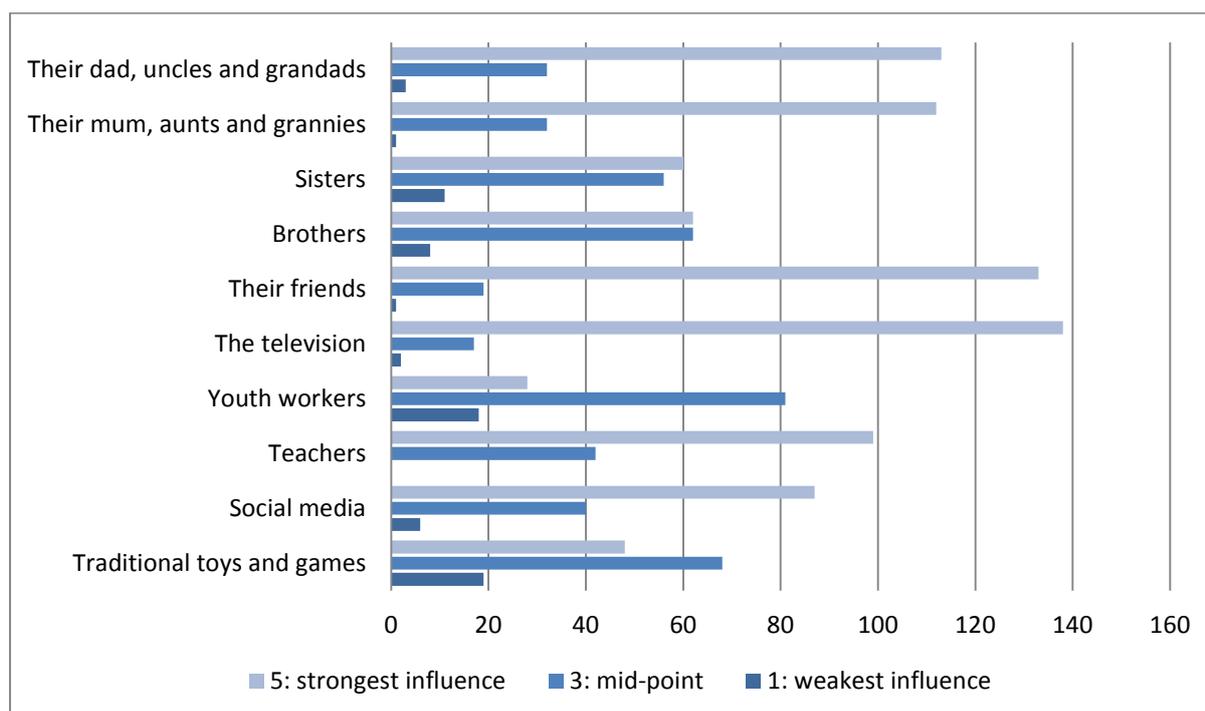
Parents were asked to indicate what were the strongest influences on stereotypical thinking by grading a range of options on a scale from 1 (the weakest) to 5 (the strongest). The responses indicated that the strongest influence is television followed closely by older male and female relatives whilst the weakest influences are toys and games. The results of this question are presented in figure 6 below.

It shows that parents believe that friendship groups, the television and families exert the strongest influence on the way that children and young people think about jobs and work. Television is the most important factor for most parents.

Parents were then asked to indicate whether or not their youngest and then their eldest child had a role model. A definition was not given to parents for the term 'role model' so it considered in its broadest sense and open to interpretation. 58 per cent of parents said that their youngest child had a role model, in additional 65 per cent said that their oldest child had a role model. Clearly, there is a significant minority of parents who think that their children do not have role models.

The analysis of the age and gender of the children for whom parents were able to identify a role model are presented in Table 6. It shows that regardless of age or gender, an overwhelming majority of children's role models (as identified by parents) are members of the family. Boys are more likely than girls to have sporting celebrities as role models, but this remains a small minority relative to role models within the family.

Figure 6: Please tell us how strong an influence the following are on the way children and young people think about jobs and work? (n=227)



This is an interesting finding as it seems to contradict the preceding statement about the importance of TV as an influencing factor. If TV was an important factor then it would be reasonable to surmise that more children would have role models from the TV. There could be a range of factors which explain this finding. Parents might perceive a role model to have a broader definition than as simply being a factor that influences the way that their children think about jobs and work. Alternatively parents might regret that many children have media influences, but that their children benefit from role models that are closer to home. A third explanation might be that children reject what they see on TV as role models and chose those that are more familiar to them. This area would benefit from further investigation. However, it does reinforce that parents acknowledge the role that they and their close family plays in providing positive role models for their children.

Table 6: Type of children's role model as identified by parents, categorised by age group and gender

	0-5 years		6 to 11 years		12 to 18 years	
	boy	girl	boy	girl	boy	girl
A member of their family	18	23	23	25	28	34
Someone they know in the community	2	1	1	1	0	7

A music celebrity	0	0	0	1	1	1
A sporting celebrity	2	2	11	0	8	1
A TV celebrity	4	1	3	2	1	0
Someone else famous	3	1	1	0	2	0

Respondents were asked to indicate the gender of the role models which their children had adopted. Table 7 provides the response and indicates that the majority of the role models which parents thought their children had were the same gender as their child. Older children were however more likely to have a role model of a different gender, and in particular older girls were more likely to have role models of a different gender.

Table 7: Children's role models by gender; by age and gender of the child, as reported by their parent.

age band	boy with male role model	boy with female role model	girl with male role model	girl with female role model
0 – 5 years	22	4	6	22
	41%	7%	11%	41%
6 – 11 years	35	4	11	22
	49%	6%	15%	31%
12 to 18 years	30	11	15	28
	36%	13%	18%	33%

Respondents were asked whether or not they felt that the role models which their children had adopted were good role models. The majority of parent respondents felt that the role models which their child had were good (89% of youngest children's role models and 88% of oldest children's role models).

Parents were also asked if they had tried to introduce role models to their child (see Table 8). Results show that 4 out of 10 children have been introduced to a potential role model by their parents. So, whilst the majority of parents thought their children's role models were positive they were still keen to encourage their children to get to know other role models.

"I am trying to get her comfortable with dealing with all sorts of people appropriately in different situations."

Survey respondent

Table 8: Have you tried to introduce your youngest / oldest child to people who you would like them to see as role models?

Answer options	Total youngest child	Percentage	Total oldest child	Percentage
Yes, I've tried to introduce them to role models	94	40%	64	43%
No, I've not tried to introduce them to role models	143	60%	84	57%
Total	237		148	

5.3.3 Gender as an influence on young people's decisions

The survey sought to discover parent's views on the way that gender affects the choices that children make. Respondents were quite clear that boys and girls play differently with 78% of those answering this question agreeing that this is the case. The majority of parents (81%) felt that toys sold in shops should be presented in a way which appeals to both boys and girls.

Respondents were asked to consider the role of gender in the job and career choices which children and young people make. A large proportion of respondents (40%) felt that gender influenced choices of some groups of young people whilst 38% felt that gender affected some but not all choices.

Table 9: The effects of gender on career and job choice (n=257)

Answer options	Total number of responses	Responses %
Yes, it is the major factor to affect their choices	32	12%
Yes, it is a factor but only affects some young people	103	40%
Yes it is a factor but only affects some of their choices	97	38%
No, it is not a factor which affects their choices	25	10%
Total	257	100%

Parents were asked to provide information about the extent to which they personally tried to influence their children regarding gender stereotypes. The majority (82%) of respondents indicated that they actively tried to set an example by sharing household tasks with their partners. The majority of parents (79%) also indicated that they were likely to challenge their children if they express gender stereotypes.

Summary

In summary, parents are clear that gendered career choices should be challenged and the research notes the important role of parents and schools in this regard. Schools offer opportunities through formal and informal curriculum and pastoral interventions. Teachers, school staff and family members make an important contribution as positive role models for young people, and parents have provided evidence that many try and influence children's' gendered perspectives by trying to set a good example with regards to sharing domestic roles and responsibilities with their partners. Parents are strongly supportive of activities which challenge children and young people's gendered views and decisions and many actively take steps to challenge these.

5.4 Children and Young People's perspectives on the factors influencing their decisions

In the case study areas, 5-7 year olds and 14-16 year olds were given tasks which had been designed to reveal any stereotypical thinking about job roles. Although a small number of 5-7 year olds exhibited gendered thinking, on the whole, the Foundation Phase cohort seemed to have few reservations when presented with the possibilities of boys and girls aspiring to occupations outside those traditionally determined by their gender. Some children did, however, make assumptions about what these aspirations might be beforehand, based on their readings of gendered occupational norms. The research provided evidence of the important messages which can be conveyed about the acceptability or desirability of certain jobs or roles. One year two boy for example rejected the idea that girls could be farmers due to his own mother's dislike of digging and agricultural machinery.

"That's unusual for me . . . because my mother's worst nightmare is digging and driving tractors." **Year 2 pupil**

This comment stresses the importance of gendered norms, behaviours and expectations amongst the immediate family; the boy's immediate female reference point for what he considered usual or unusual understandably being his mother.

The research also provided evidence that television can have a very important influence on the way that children develop an awareness of gender-related career roles. Confronted with the idea of men becoming nurses, one child noted that this was acceptable because they had seen a male nurse in the television series 'Holby City'.

Four stakeholders also gave examples of the specific influence of TV programmes on children and young people; one gave the positive example of having Wendy in Bob the Builder who works alongside Bob in the construction industry, another reported a recent conversation that they had reminiscing about the positive image of Kylie Minogue when she was playing the character of a female mechanic in neighbours.

Other stakeholders chose to talk about the negative impact of role models from popular culture.

"Unfortunately for many they have role models who have gained celebrity or married into wealth. It affects young people's understanding of how much things cost and how the route to being happy is by hard graft. Before the recession there was an idea that any-one could have anything and this has filtered through to young people. The link between what you earn and what you have has been lost." **Stakeholder**

A feature of this discussion is that a media representation of an occupation can validate and legitimise it for young children.

The 14-16 students at each Case Study setting participated in an exercise where they were given a list of occupations that a new hotel in the town wanted to fill (Hotel manager, Hotel

receptionist, Head chef, Hair salon manager, Porter, Fitness class co-ordinator). They were also given a list of candidate profiles with gender-unspecific names (e.g. Andi, Peta) and asked to match the most appropriate candidate with the most appropriate job. These activities were devised to reveal tendencies to gender stereotype amongst the 14-16 year old cohort. Yet, interestingly, they did not produce any notable conflicts or discussion of gender in any groups – when the gender of the candidates was revealed following their selection, all of the students remained constant to their original choices. Further, almost all were very relaxed about the consequences of their choices being that, for example, a male member of staff would manage the Hair Salon and a female member of staff would be the Hotel Porter. However, some of the subsequent conversations did produce some interesting reflections on gender and occupation among the groups. For example, the 14-16 cohort were generally well aware of both inequalities in certain sectors, and the changes that were taking place in the labour market that enabled women and men to enter sectors of employment that had been traditionally inaccessible to them:

“People are saying that women’s status has developed but it still remains that some people still say women can’t do building work.” **Female Year 10 pupil**

“There has been an improvement, I believe, in these jobs over the years for women but they are not equal as yet”. **Male year 10 pupil**

Many 14-16 year olds felt that they had the confidence to challenge the career expectations of parents, other family members and the community. Notable was the belief by 14-16 year olds in one group that women were particularly limited in their career choice however most felt that whilst this had been a problem in the past this was becoming less of an issue.

“It is a big problem but it stems from ages before women were given rights. They were discriminated against because of their gender. Things are changing but it is taking a long time”. **Female year 11 pupil**

“I think it’s starting to change – like before it was only certain jobs that women do and men do that job but I think as we got older that change is happening”.
Female year 10 pupil

Members of the groups were largely open to the idea that people from either gender could legitimately work in occupational sectors that were not traditionally associated with their particular gender. The girls in the Wrexham group were especially vocal on this point:

“because if you look at different jobs like farming I know men and women do that and like hairdressers men and women do that.” **Female year 10 pupil**

One female pupil pointed to pioneering women within these sectors ‘proving a point’ and in doing so setting a precedent for women, legitimising further entry into these sectors:

“I don’t think you should be stopped from doing what you want to do because that may seem to be a male job – the guys would always get into it and the girls can never do it but we like have proved that women can go into stuff like that.”
Female year 10 pupil

The 14-16 cohort at each research site were also invited to reflect on their own preferences and aspirations. The students were keenly aware of the gendering of certain subjects and career pathways, but also clearly conscious that expectations could have a role in shaping their perceptions and in perpetuating stereotypes:

"I think women are more towards the arts subjects" **Female year 10 pupil**

"Why do you think that is?" **Researcher**

"I think it's just stereotypes, and you expect men to go into like building or firemen or policemen and stuff. It just all [comes] from stereotypes." **Female year 10 pupil**

The same female student, who wanted to become a Civil Engineer was, when asked about why she was looking to choose STEM subjects for her A-Levels, had a clear rationale for this that seemed to be unaffected by gendered expectations, and was linked to future economic prospects:

"Maths and sciences are my best subjects, and er . . . the money!"
Female year 10 pupil

The research indicates that children in the Foundation Phase have a tendency to develop gender stereotypical thinking, ascribing to members of the opposite gender *en masse* certain characteristics and competencies. However as children get older, they apply the knowledge and understanding which they have gained through formal and informal education to challenge their earlier understanding of the world.

5.4.1 School infrastructure, curriculum and pastoral interventions

Young people were provided with opportunities during the research to discuss the provision of careers' education and work-related learning which they had received. Whilst all participants recognised the importance of careers' education and work-related learning the timing of this was contentious. Some participants felt strongly that careers education should start in the Foundation Learning phase but others felt that this was too early asserting that it was '*a bit pushy*'. Others expressed the view that the first year of secondary education was more appropriate. A further group felt that year 9 was the best time to learn about careers. Most significant was that young people recognised the importance of careers education and work-related learning in informing GCSE option choice towards the end of year 9.

"I think you should do work experience earlier than you do because if you have an idea in Year 9 and then you decide to take subjects for that and when you go on work experience in Year 10 and you find it is completely different, you haven't taken the subject for what you want to do then." **Female year 10 pupil**

Young people made few explicit comments about whether the advice they had received was in any way gendered or biased however participants did provide examples where school teachers did offer advice and guidance which they had valued and which had inspired them to work harder to achieve their aspiration.

“My physics teacher told me there’s scholarships to go to London for the Civil Engineering, because it’s the top in Europe for it. So if I get an A or an A, then I could get a scholarship.”* **Female year 10 pupil**

There were also examples provided of young people receiving advice and guidance from family members to supplement that received from formal sources. The example provided illustrates the importance of young people seeking information, advice and guidance from a variety of credible sources including from specialist guidance providers to ensure that the messages that they receive are accurate as inaccurate information and advice can encourage unrealistic expectations.

“My aunty told me it would be easier for me to get a job because in certain companies they’ve got to have a certain percentage of women to men. And because there’s less female engineers than men, I’m guaranteed a job then when I went for it.” **Female year 10 pupil**

5.4.2 Family and community interventions

The 14-16 year old participants adopted a range of role models and often chose those whose achievements were meaningful and attainable in their own immediate context. This meant that most learners cited family members or friends who had inspired them to consider a particular pathway. What was also interesting was the willingness of young people to admire and aspire to qualities evidenced by somebody outside their own gender.

“My brother – he did really well in his A-Levels and is in Uni now. I want to do the same.” **Female year 10 pupil**

Two other female members of the same group both wished to enter traditionally male-dominated fields of employment: one wanted to become an accountant and another civil engineer. Significantly, both had female role models within their family who they wished to emulate.

“My cousin, she did really good in her A-Levels, and she’s left Uni and now she’s an accountant, in an accountancy. So I want to do as well as she’s done.”

Female year 10 pupil

One female student stressed on several occasions that she had received advice and guidance from her aunt, and was committed to Civil Engineering. Interestingly, as a successful Civil Engineer herself, the student’s aunt had clearly advised her niece that her gender may nowadays be considered an advantage, precisely because of employment policies designed to combat historical and prevailing inequalities in the sector. She did, however, add a note of caution about the challenges and attitudinal barriers a woman in a traditionally male-dominated industry might face.

“My aunty told me that engineering is more male-driven and she said there’s a big draw now for females. She said it’s quite hard to work around all the men sometimes so I think it would attract more men and women to the job. [. . .] Just like the idea of being around loads of men and not have anyone, like, to have anything in common with might not be as attractive.” **Female year 10 pupil**

The aunt has clearly exerted a powerful influence on the career aspirations of her niece, and seems to have acted as a role model and mentor. In this case, the presence of a strong role model within a family has helped to legitimize and demystify a potentially successful and lucrative career pathway that may otherwise have been left unconsidered. As regards the mentoring side of this aunt’s role, they have clearly provided useful information to the students about the culture, policies and opportunities that may exist in that field.

In other instances, male learners in the 14-16 group demonstrated the importance of the examples their male relatives set. One boy wished to join the armed services because his grandfather had been a soldier and he wanted to emulate his example. Another boy wished to become a Ghillie (game keeper) because of his experiences of hunting and fishing with his dad and male relatives. There were no examples provided of boys wishing to pursue non-traditional roles due to the examples set by male relatives.

Whilst discussing role models, some male students mentioned the impact of individuals outside the family such as prominent celebrities. For example, one boy from a secondary school, who wanted to study Genetics, had been inspired by Brian Cox:

“Books mainly as well as people in the media like famous scientists such as Brian Cox who have written books on it and I think they are extremely interesting”. **Male year 10 pupil**

None of the female participants cited any such role model, perhaps reflecting the dearth of such female role models in the media.

The literature review suggests that young people are risk-averse in their behaviours and will adopt stereotypical behaviours in their education and training choices. The findings of this research suggest that the current picture is complex. Young people are aware of the historical context for bias and stereotypical career outcomes but acknowledge that this is changing, albeit slowly. The research provided evidence that formal and informal education and information advice and guidance from a variety of sources have an impact on the aspirations of young people and they are willing to seek this out and to listen and reflect on the messages which they receive. The research suggests that girls are more likely to act on advice from a variety of sources to break the mould and pursue non-stereotypical career choices. However, the research indicates that whilst boys acknowledge the segregation of women and men’s work roles, they are less likely to pursue non-stereotypical careers.

5.4.3 Gender as an influence on young people’s decisions

As has been previously noted, the gender of a child has a bearing on the types of influences which are exerted on them. Although young children exhibit a level of gender stereotypical thinking regarding job and career this changes for some children as they grow. The research with girls in this study did not provide any evidence that peer pressure was a particular issue which prevented girls from pursuing non-typical jobs or careers. The findings do suggest however that girls are aware of the need for female ‘pioneers’ to lead by example in male

dominated occupations. Anecdotal evidence such as the increase in females studying land based engineering courses following the recruitment of two female tutors, or the girls only courses in construction that serve to build their confidence as well as their skills provide examples of how this can work. A number of examples were provided which suggest that girls value the role of a mentor who can encourage and help their protégé to develop confidence in order to challenge societal stereotypical norms, such as the girl who participated in the focus groups who wanted to follow the lead of her aunty and become a civil engineer.

5.4.4 Socio-economic factors

There were few differences between the horizons of expectation and aspirations expressed by the 5-7 year-old Foundation Phase cohorts, regardless of the socio-economic context of the research site. Young children showed no awareness of the barriers that may confront them on account of their socio-economic status, in spite of data elsewhere in this report showing that they did have some awareness of gender-determined expectations in certain occupations. For example, most of the young (5-7) children who expressed a desire to become teachers did so primarily on the basis of their affinity with their own teachers, and were not conscious of any socio-economic status being attached to teaching as an occupation. However, in one of the more affluent settings, the aspiration to become a teacher was for one female pupil grounded in existing family occupations which seemed to be seen by this pupil as enabling precedents. This was also the only primary-aged pupil who demonstrated any clear sense of the educational prerequisites necessary to become a teacher, as she was from a family where her mother was a teacher and had gone to University, as was her grandmother:

“You have to go to University first. My mum went into University [. . .] my grandma is a teacher”. **Female year 2 pupil**

Nevertheless, on the whole children from the Foundation Phase did not generally show any clear understanding (conscious or otherwise) of the advantages that may be afforded by higher socio-economic status or the barriers lower socio-economic status may present. Many of the children in this age range expressed fantasy career aspirations which are unrealistically high in many cases, e.g. footballers and princesses, and did not at this stage show that they were aware of structural inequalities that might affect them.

The data collected by the 14-16 cohort enabled more some concrete observations to be made on the links between socio-economic status and aspiration, however. At two of the more affluent research sites (the locality around the Wrexham case study school and Monmouthshire), parents had clearly advised their children on viable and attainable career pathways. In one instance, a male pupil who wanted to work in an outdoor environment had had to negotiate the precedents and expectations set by his parents' experiences and occupational statuses:

“Parents [are an influence], but in a different way because one is a teacher and the other is an accountant, but I want to be outside and do something different to what my parents are doing.”

Another noticeable observation was the tendency of pupils in the more affluent settings to talk about parental encouragement of their interests, often through the provision of resources and extra lessons outside school, and about how learning within families had influenced their

own interests and informed their own aspirations. One of the male pupils in the Wrexham secondary school, who wanted to become a chemical engineer, spoke about how both his parents had inspired his love of science:

"My mum and dad because they do stuff which I think is interesting and cool"
Male year 10 pupil

"In what way?" **Researcher**

"My dad does like 'sciencey' things and I like science".
Male year 10 pupil

A female participant at the Caerphilly secondary school, whose parents had clearly encouraged her in her aspiration to work in the performing arts had attended a drama school when younger.

"I am a drama queen apparently, and they know [parents] I want to do something with drama. When I was young I went to a drama school nothing big but it was big to start with." **Female year 10 pupil**

Similarly, in the Wrexham Foundation Phase setting, one Year 2 boy wanted to become a geologist, which was related to his hobby of collecting fossils. This boy had clearly experienced encouragement from his mother in this pursuit.

"[I have drawn] A geologist." **Male year 2 pupil**

"Ok, great. Why do you want to become a geologist?" **Researcher**

"Because I like fossils and rocks [. . .]" **Male year 2 pupil**

"Why do you want to become a geologist then? Where have you heard about geology?" **Researcher**

"My mum told me about geology and she told me what it's all about and then I quite liked it and I started making my own fossil collection." **Male year 2 pupil**

It was especially noticeable that in the less affluent secondary setting, the 14-16 learners tended to look towards siblings or members of their extended families who had succeeded to provide them with forms of guidance and inspiration elicited from parents in other schools.

"My brother – he did really well in his A-Levels and is in Uni now. I want to do the same." **Female year 10 pupil**

"My cousin, she did really good in her A-Levels, and she's left Uni and now she's an accountant, in an accountancy. So I want to do as well as she's done."
Female year 10

"My aunty is a civil engineer and um she's just looking like she's loving it! [. . .] She did Open University classes and she just sort of fell into it. [. . .] My physics teacher told me there's scholarships to go to London for the Civil Engineering, because it's the top in Europe for it. So if I get an A or a A, then I could get a scholarship."* -
Female Yr. 10

Children and young people from more affluent backgrounds appeared to be more able to draw on informed parental advice and guidance in plotting a career, whereas pupils without this resource tended to draw on role models who are high-achieving siblings or part of their extended family.

5.5 Summary

Stakeholders' perspectives

Stakeholders suggest that Career learning, work experience and work-related learning throughout a child or young person's education can teach young people about stereotypes with relation to their own career aspirations.

They report that training the children's and young people's workforce to challenge stereotyping could be helpful tackling gender stereotypical career choices.

Stakeholders also say that: Positive role models can have a significant impact on the career decisions of young people, and that

The impact of adult family members as role models diminishes as children grow up. Family members are replaced by role models from the community or siblings as the most important role model influence.

They say that children's understanding of gender stereotyping in the workplace is reinforced by their observations of adult roles such as parents, teachers and through the television. The availability of gendered toys can reinforce these messages.

Most stakeholders thought that gender was an important factor influencing the career choices of young people and that few young people choose to challenge stereotypical career behaviour exhibited by their peers.

Parents' perspectives

Parents who responded to the survey demonstrate strong support for challenging stereotypical views.

Parent-respondents believe that girls are interested in science and engineering, and most thought that their interest should be encouraged.

Parents strongly support the idea that gendered career decisions should be challenged and that school has an important role to play in this regard.

They suggest that 6 out of 10 of their children collectively have a role model, and that those role models are mostly found within the child's own family.

They also say that most of their children identify with role models of the same gender. Older girls(aged 12 to 18 years) are more likely to have male role models than any other age group.

Parents generally approve of the role models whom their children adopt and some actively try and introduce their children to role models who they see as appropriate.

Parents consider that gender does affect decisions however only for some children and in some contexts.

Many parents try to influence their children's views of gender by setting a good example through the sharing of domestic tasks with their partners.

Children's and young peoples' perspectives

Children are clearly influenced by the accepted and expected gendered norms they observe within their own families.

Media representations can validate children's understanding of occupations in both positive and negative ways.

Young people are aware of gender inequalities in some occupations and are aware of the changing historical context for this.

Young people recognise the importance of careers education, information advice and guidance and recognise that they need to be prepared prior to choosing subjects in Year 9.

Role models of both genders exert an influence on girls' non-stereotypical career aspirations.

Girls value the idea that women can act as pioneers for change and will try to follow their example.

Boys cited positive role models from the media often tied to their interests, but no girls cited a celebrity role model.

Social economic status appears to have less influence on children's career preferences in Foundation Phase than it does when they become teenagers. Children from more affluent backgrounds are more likely to have their interests encouraged and actively nurtured.

6 Conclusions

This research has addressed the question; ***“at what age and how do children in Wales form ideas about work and gender?”*** Drawing on perspectives from the literature, key stakeholders, parents, and children and young people this report has presented a range of key findings. This section brings together some reflections on those findings.

The first introductory point to make is that there are few clear areas of consensus where all voices on a particular subject expressed the same perspectives. The findings presented here therefore aim to summarise what are very complex and inter-related issues to which each individual brings their own values and prejudices. The report focuses on key findings but each of these could be subject to further moderation and qualification to represent the fuller picture, so in effect it is a report which collates most frequently expressed views and opinions from informed individuals.

And secondly as a matter of introduction, there was a strong interest in the research from employers, parents, educators and other interested individuals. The subject area was one that they found relevant and interesting, and most were happy to explore the ideas and question both their own and the researchers' assumptions about gender roles in the contemporary Welsh economy

Four key themes emerge from the research;

1. Girls know that they are girls and boys know that they are boys from a pre-school age – and the general view is that this occurs around the age of 3.
2. Children's views reflect the reality they see around them.
3. As children grow into young adults they understand more about gender roles in the workplace and explore their own willingness to challenge stereotypes
4. Young people need good information about jobs, careers and progression pathways. Family members and those whom young people respect are important sources of information.

The first theme focuses on the age at which children become aware of gender and how it relates to them. While there is no consensus among the stakeholders and parents who engaged in the research on the exact age at which children become aware of gender there is general agreement that this occurs around the age of 3 and in any case, before attending school. There is less consensus on how this influences children's play behaviour (whether they chose to play with just boys or just girls, or what they chose to play with), or indeed whether play behaviour can be challenged (some professionals say it can be moderated whilst others disagree). Most respondents said that this depends upon their siblings and the family and friendship groups around them. What is clear however is that gender is a factor in developing young people's interests. Boys are much more likely to cite occupational goals that align to hobbies and out-of-school interests that they develop (often with their fathers), than girls do.

The second theme is that children's views reflect the reality that they see around them. Evidence for this is drawn from a range of sources such as the stakeholder views that family

contexts are changing as are young people's views of home and work lives, so in families where women are engineers or the main earners, and when men do the childcare or are nurses these are perceived by their children as normal. Other evidence was cited by parents who say that their children's role models are overwhelmingly drawn from within their own families. There was also evidence that the presence of older siblings had an influence on children's understanding about gender and their future roles.

Children themselves say that they have future job or career aspirations which are either drawn from what they see around them such as teachers or police officers or doctors, or from fantastical characters in their story books and on TV such as footballers and princesses. Children's aspirations are highly gendered at an early age. Young girls' aspirations are likely to be linked to nurturing and nurturing professions which reflects their reality that their mothers and their female teachers are the ones that nurture them. Boys at this age are more likely to aspire to jobs in sports or jobs linked to their hobbies and interests which are often developed with their fathers or uncles. There was no evidence in this study to examine the influence on children who are raised in single parent households and how this impacts upon their views of work roles and aspirations.

Other influences on career aspiration include television programmes which represent to them a certain reality. While parents and stakeholders said that they worried about celebrity culture and TV programmes this was an abstract worry which they seldom expressed in relation to their own children. So while they thought that some children were adversely affected by gossip magazines, their own children had role models of which they approved and which were drawn from within the family. Children themselves rarely said that they wanted to be like a named popstar or celebrity – it was more of a generic fantasy. Furthermore while some stakeholders expressed worry about TV, they also said that role models like Wendy in "Bob the Builder" were really useful. There were therefore a range of perspectives on the influence on young children of TV. For some it was a force for good, for others it was a malign presence, and for the remainder it was simply overstated.

The literature clearly set the context for the third theme which is that as children get older and mature into young adults their views about the subject, course and career choices are based upon a more sophisticated understanding of the world around them. This was supported by stakeholders, many of whom are engaged in projects with young people in key stages 3 and 4 that encourage them to engage with employers and industry in a concerted effort to shape the way they see particular sectors or jobs. So for example, the learning provider that used images of women in a particular male-dominated industry and had female teaching staff were pleased to have more women enrol on their course; by shaping how young women saw the course they shaped their understanding of the world and how they might fit within it. The young people themselves were also able to articulate a much wider set of employment aspirations which reflected their knowledge of the world. Aspirations become linked to an increased self-awareness including issues of capability and potential. Young people become increasingly aware of professional jobs and can usually articulate a pathway to these roles albeit not all pathways or routes. Older girls in particular are aware that a wide range of options are available to them. Those that were choosing to challenge social norms did so knowing that was exactly what they were doing – but were doing so with a degree of self-awareness.

However, children and young people's awareness of gendered roles in the workplace is not well developed. They did not recognise the pay and progression implications of their expressed choices. Work roles and the workplace are complex issues and awareness of these issues is largely developed through experience of the workplace and as a consequence is more likely to develop once young people enter the work place.

The older age group were still predominantly talking about job roles that they saw around them and roles that conformed to stereotypical gender roles, such as psychology for girls, working outdoors for boys, and teaching for both genders. These young people did have a better understanding of the world of work and of associated gender expectations. Furthermore, some of them consciously expressed ideas about challenging those stereotypes.

The final theme is that young people, along with other stakeholders, said that they wanted good guidance on what their options were. While there is always debate on when their career related learning should start, there was agreement that it had to be before Year 9 when their subject choices needed to be made. There was some evidence from the stakeholders that suggested that if young people are given opportunities to see workplaces, to talk to people who work in those places (whether introduced through family or school or other networks), then they are more likely to consider these as possibilities. Further, if they are supported with a programme of career learning they will know where to find information about pay, employment conditions, job opportunities, qualification requirements and career progression – and they will understand why knowledge of these matters is important.

A final point relates to socio-economic conditions. Evidence from this study suggests that social economic status appears to have less influence on children's career preferences in Foundation Phase than it does when they become teenagers. The key factor here lies in parental interest and ambition as children from more affluent backgrounds are more likely to have their interests encouraged and actively nurtured. Examples are the young boy whose early interest in fossils was nurtured and supported by his mother, or the young girl whose parents paid for her to attend drama classes. These children may in time decide that they don't actually want to be a geologist or an actor, but these early experiences will give them skills, interests, self knowledge and an experience of dedication that they will use in their future lives.

Recommendations

Following on from the findings of this report, Chwarae Teg recommends the following actions are taken;

1. Children should be encouraged to think about careers from an early age.

In their early years children should engage in learning experiences which help them to think about what work is, where their own skills and interests lie, and how it is possible to imagine their working futures that are based on their own individual talents (and not just what they think they might be expected to do). This type of learning can begin in the Foundation Stage which is a particularly crucial age for the development of ideas of appropriateness of actions for boys and for girls. This is not to say that children at the age of five should be expected to have a career plan, rather it is about demonstrating that men and women can take up any career path they choose. This is a particularly critical stage as the findings illustrate that socio-economic status does not impact on children's career aspirations at this age as it might do as age increases. Nurturing ambition at a younger age may reduce socio-economic boundaries.

2. Parents should take an active part in the career thinking of their children through participation in school or employment based initiatives and through a range of informal learning opportunities.

The research reiterated the importance of parents in the career learning and choices of children. The majority of parents feel that children have an awareness about gender by the age of three so their very early conceptual ideas on gender are formed predominantly within their home environment, furthermore parents see themselves or family members as role models and they have the greatest influence on children's thoughts about careers.

3. Primary and secondary schools both have an important and influential role on young people's learning, and they should have a clear offer in terms of impartial and independent careers education, advice and guidance.

Careers' advice and job-related activities would have more of an impact if it were not a one-off event but embedded within the curriculum and throughout their time at school. In this way messages can be reinforced continually and children can develop and reflect on their ideas over time. The danger of leaving career learning to those years when pupils are making choices is that they do not have time to explore their ideas and will resort to making safe (i.e. stereotyped) choices. Career guidance varies from school to school and is currently being reviewed in Wales. Chwarae Teg is interested in how the statutory Careers' Service is developed and hopes that there is a focus on industry role –models, conversations around earning potential and the local labour market and that careers' guidance is multi-faceted over a period of time.

4. Projects which link employers with children and young people to inform them about different careers, progression routes, earning potential and employer requirements should be continued and extended.

The research suggests that children and young people's understanding of paid work could be improved. It is reported that they are not fully aware of how the workplace operates, the role of qualifications in offering routes into employment, or the idea of promotion or career progression. Employers, employer organisations, professional bodies and Sector Skill Councils have a role to play in helping young people to understand their values and the requirements they have of their workforce (and the relative lack of importance of gender). Many are already running very successful projects. Enhanced links between employers and schools or community groups can help to create spaces in which this dialogue can take place.

5. More work could be done to encourage girls to participate in activities that help them to find an expression of their own passions and interests.

The exploration of career issues is not limited to what goes on in the classroom. The findings of this research suggests that boys are heavily influenced by taking part in activities and hobbies alongside their fathers and that this activity is a stimulus to developing personal interests which are then expressed in career ambitions. This was not the case for girls. Therefore, it is recommended that more work is done encourage girls to participate in activities that help them to find an expression of their own passions and interests. Mothers have a role here to help support their daughters as do people in schools and the wider community who run a range of activities, extra-curricular activities and clubs.

6. Role models and mentors should be encouraged to help give young people an informed view of what working in a particular role is like.

The use of positive role models from non-traditional careers has been found to be a useful tool in engaging young women in non-traditional sectors. This can take a range of forms from using positive images, ensuring that recruitment fairs are attended by potential role models, providing young women with appropriate mentors and having relevant information available to answer the concerns of young women and their parents.

7. Teachers, youth workers and career advisers should participate in training that sensitises them to gender related work stereotypes, and provides them with tools and resources that allows them to challenge stereotypical behaviours and ways of thinking.

Training could be offered to teachers in opening up opportunities to children and young people and increasing their knowledge of industry and the job opportunities linked to subject choice. Training the children and young people's workforce to challenge stereotyping would be helpful tackling gender stereotypical career choices. However, it is recognised that there are cost implications in terms of staff cover when teachers are released for training.

8. Careers service providers should be actively engaged in providing career awareness and promoting equality of opportunity for all young people in Wales.

All young people need to understand how they can engage in labour markets. Some young people, particularly those from more deprived socio-economic backgrounds, are unlikely to learn about labour markets from anywhere other than a careers service

provider. There is a particular need to ensure that career learning that promotes equality of opportunity is delivered to these young people.

9. Further research is needed to find out how retailers and the media influence children and young people's views of gender, of work roles and aspirations.

This research documented views that retailers and the media could have both positive and unhelpful influences on children and young people. Further research could be carried out to ascertain the impact retailers may have on parents' views of gender and subliminal messages children and young people receive.

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Appendix Two: Stakeholder Interviewees

Participant Stakeholders

Pam	Boyd	Executive Director	ContinYou Cymru
Gill	Byrne	Executive officer	Ray Ceredigion
Bob	Cater	National Director	EESW
Mark	Chapple	Families And Schools Together Wales Programme Manager	Save the Children
Barbara	Coleman		Communities First
Helen	Devitt	Regional Manager Wales	Construction Youth Trust
Andrew	Evans		Cogent
Sarah	Gould	Programme and Project Manager	Lantra
Carina	Hicks	Educ8	
Allison	Hunt	Regional Manager Wales	National Skills Academy Wales
Catriona	Learmont	Community Impact Operations Manager	BITC
Jenna	Morris		CBSA
Ann	Pari Williams	Manager	Gyda'n Gilydd Team (TAF) Gwynedd Council
Colin	Powell	Manager of Gwenfro Valley ICC Adventure playground (5-16 year olds)	Also a director for North east Wales Play regional group
Wyn	Prichard		Construction Sector skills
Roger	Silvester		Construction careers adviser
Mike	Tan		Careers
Tom	Taylor	Manager	Communities First
Mark	Wilmore	Transition and Progression Manager	Careers Wales
Ann	Woods	Senior Scheme Organiser	Homestart

In addition a further 6 individuals were interviewed as part of the fieldwork visits in Monmouthshire and their responses have been combined with those derived from telephone interviews with the above group.

Appendix Three: Survey Respondents

This section provides information about the online survey for parents. It includes information about the survey process and profiles those who responded.

The survey was open from for a period of nine weeks from February 1st to April 8th 2013. The survey was disseminated through a number of different channels including through the data bases of iCeGS, Aberystwyth University and Chwarae Teg. In addition, a range of relevant organisations across Wales were contacted and agreed to host the survey on their websites or disseminate it through their social media channels. Finally, stakeholders engaged as interviews in the research were asked to disseminate the survey amongst their own colleagues and contacts. A full list of stakeholders and supporting agencies appears in appendix 2.

There were 245 completed responses to the survey. Of these 17 (6%) were provided in Welsh and 327 (94%) were provided in English. The results of both groups have been combined and the results presented together. There were more responses from females (80%) than Males (20%). The following table provides a breakdown of the responses to the survey by gender and the language which respondents chose to answer the survey questions.

Table 1: Gender and Language profile of respondents (n=245)

	Female	Male	Nil response	Total	Percentage
English	177	32	19	228	93
Cymraeg	4	12	1	17	7
Total	181	44	20	245	100%

The combined responses of parents indicated that they represented experiences from having parented 445 children in total. The total was equally divided between boy children (220 or 49%) and girl children (225 or 51%).

Table 2: The gender of respondents' children

	Boy	Girl	Total
Child 1	120	125	245
Child 2	83	77	160
Child 3	14	20	34
Child 4	3	1	4
Child 5	0	1	1
Child 6	0	1	1
Total	220	225	445
Percentage	49%	51%	100%

The average age of the youngest children of parent respondents is 9 and the average age of oldest children is 12. Two thirds of the respondents (65%) had more than one child. The ages of respondents children was distributed across the age ranges with the majority of respondents children (46%) in the 12 years and older band. The ages of respondents' children appear in table 3 below.

Table 3: Ages of respondents children (n=242)

	Total number of children in the age band	% of the total children
0-5 years old	55	23%
6-11 years old	75	31%
12 years and above	112	46%
Total	242	100%

The majority of parents (68%) were the primary carers of their children and 28% sharing the care with another adult. Table 4 below presents this data as a table

Table 4: The extent to which parents are primary carers (n=243)

Answer options	Total	Percentage of the total answers
Yes	165	68%
No	10	4%
Share	68	28%
Total	243	100%
Nil response	2	

The respondents were asked to indicate what the job of the main income earner in their family was. The majority of respondents (61%) indicated that they were in white collar managerial roles with white collar, non-managerial roles (24%) forming the second largest group. The total responses are indicated in table 5 below.

Table 5: Roles of the main income earner in respondent's homes (n=242)

Answer options	Total survey respondents	Percentage survey respondent
White-collar, not in a managerial roles	58	24%
White collar, in a managerial roles	147	61%
Blue-collar, not in a managerial roles	20	8%
Blue-collar, in a managerial roles	12	5%
Retired with a private pension	1	0.4%
Retired with a state pension only	1	0.4%
Student	3	1%
Unemployed	0	0%
Total	242	100%
Nil response	1	