Journal Article

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Abstract

Gendered expectations are deeply embedded within the fabric of a society and the classroom is no exception; binaries habitually pervade attitudes, practices and pedagogies. This small-scale qualitative-interpretive study, undertaken in one rural primary school in North Wales, explores how the learning of gender is constructed, enacted and challenged by participants functioning within Key Stage 2 (children aged 8-11 years); issues experienced by, both girls and boys, to cogitate implications for gender equity and for teachers' work. The fieldwork revealed many school participants continue to draw upon essentialist binary discourse, predominantly based on biological theories, to explain differences between boys and girls relating to classroom behaviour, subject attainment, curricular preferences and career pathways. Constant reference was made to *acceptable* ways of 'doing masculinity' and the 'high-achieving, conforming school girl culture'. Children recognised gender binaries used by teachers and were aware of societal advances in gender equity. Despite decades of research and policies, we are still some way to ameliorating gender binaries and stereotypes in this phase of schooling. Therefore, there is an urgent need for practitioners to become more reflexively aware about the complex ways in which gendered dualisms and hierarchies perpetuate and dictate relations and pedagogical practices, which constrain experiences and opportunities for girls and boys and, to incorporate multiple ways of thinking and *doing* gender in classrooms.

Introduction

Since the 1970s there has been a great richness of literature available within western society on issues of gender and education, both what is taught and what is experienced by teachers and pupils. Despite the transformation of gender relations in the UK, including numerous policies and initiatives aimed at schools, in an attempt to address gender inequalities (DCSF, 2009a; DCSF, 2009b; DCSF, 2009c), gender binaries continue to influence orientations toward school and learning. Few girls continue to study mathematics and physics at A-level (Institute of Physics 2013); boys continue to dominate classrooms (Legewiea and DiPretea 2012), more boys than girls are identified as underachieving (Bartlett and Burton 2011) and school-rejecting (Oates and Skelton 2013). It is not the intention of this paper to explore discourses related to boys' *perceived* underachievement as this is a widely researched area. However, it is important to note that although gender patterns exist in some subject areas, the impact of intersectionality (culture, ethnicity, religion, sexuality and social class) is more instrumental to educational achievement than gender (Skelton and Francis 2012; Smith 2012). Instead, this paper seeks to explore how, after decades of research and policy, the learning of gender is constructed by participants functioning within the contemporary primary classroom - issues experienced by both girls and boys – to cogitate the implications for gender equity, career ideals and for teachers' work.

Assumptions about the differences between males and females pervade modern life, culture and education (Bloom 2014). Until the mid-twentieth century biological determinist explanations dominated understandings of gender and gender formation. Male and female hormones are used to explain differences in brain development and function, resulting in oppositional patterns of behaviour, skills and cognitive abilities in men and women. It is argued that the male brain and female brain are wired differently (Knickmeyer and Baron-Cohen 2006; Gurian 2011); girls and boys have preferred learning styles (Murphy and Elwood 1998; Gurian 2011) and that their hormonal make-up causes them behave differently (Featherstone and Bayley 2010). However, essentialist claims, based on

biological theories, are strongly contested as critics argue they fail to explain diversity amongst men and women across history and societies (Marchbank and Letherby 2014). Instead, essentialist ideology needs to be problematized and dismantled, for it risks reinforcing the binary discourse, adding strength to the polarised dualism of masculinity and femininity and *acceptable* ways of 'doing' gender.

Social constructivist theories purport that men and women are products not of biology but of culture and society. Young children are confronted by dominant discourses about what it means to be masculine or feminine; pre-determined rules, responsibilities and assigned values of gender roles (Gibb et al. 2008; Lander 2011; Andrew 2012). Although gender identity is initiated at 24 months (Kohlberg in Coddington and Wiebers 2002), it is from about the age of five years children begin to follow gender stereotypes and enforce gender conformity with zeal (Devarakonda 2013). Children look to adults and their peers for guidance, picking up on explicit rules and implicit cues as to what it means to be a 'proper' girl or boy (Paechter 2007; Soylemez 2010). Fearful of straying from gender outlines, some children police each other about what they can and cannot do (Bloom 2014). However, critics of socialisation theories warn against adopting a simplistic view of social learning and sex role identity. They argue that a more dynamic conceptualisation is required of the way gender is learned and (re)produced (Robinson and Jones Diaz 2006; Francis et al. 2008); acknowledgement that gender socialisation is a complex, fragile and incomplete process (Ryle 2015).

In recent years, feminist poststructuralist perspectives have highlighted how social relations of power between males and females are perpetuated through the cultural male/female binary and, how children are active agents in the construction of their own gendered identities (Robinson and Jones Diaz 2006). An intersectional approach is also deemed to be necessary – that gender cannot be experienced or performed separately from other social identities. Poststructuralists argue that rigid definitions of what constitutes female or male behaviour should be viewed with caution as our sex and gender do not always result in a typical story of gender socialisation (Ryle 2015). Research has found that although children engage in behaviour that often reinforces traditional gender norms they may chose to ignore or reject certain discourses of masculinities or femininities, for example they do not always select a same-sex friend to model or identify with a parent of the same sex (Ryle 2015).

Gendered expectations are deeply embedded within the fabric of a society and the classroom is no exception to this; many children start primary school with established gender roles and behaviours. One responsibility of a teacher is to empower individuals to make life and career choices; promoting equity and deconstructing gender binaries (Yu 2010). However, it is not uncommon for teachers to fall short of this duty by introducing gender stereotypes and bias in the classroom through the language they use, the resources they draw upon, the subjects they encourage pupils to study and the way they interact with girls and boys (Soylemez 2010; Thompson 2011). Stereotypes which commonly enter the classroom position girls as articulate, focused, organised, tidy, diligent, co-operative, fussy and gossipy (Martin 2012; Bell 2013). In contrast, boys are perceived to be aggressive, dominating, loud, disorganised, untidy, easily distracted and demotivated (Gibb et al. 2008; Bartlett and Burton 2011; Legewiea and DiPretea 2012). Lyng (2009) argues the dominance given to examining boys' perceived underperformance and rejecting school subcultures, informed by theories of masculinities and binary discourses, has left girls' school sub-cultures almost invisible. Thus, more research is required on girls' school experiences and sub-cultures; particularly the influence that postfeminist narratives, which position girls as empowered, capable and successful, have had on this group of learners. Research in this area, based on an intersectional approach, will give further insight into some of the pressures faced by girls and their ways of doing school commitment, school indifference and school rejection.

Traditionally certain curriculum subjects have been labelled as being more suitable for girls or for boys. Boys have been perceived to be good at science, mathematics and information technology and girls proficient at English, art, domestic science and modern languages (Paechter 2007; Thompson 2011; Bloom 2014). Some of these perceptions date back to (if not before) the first Education Act in 1870 which gave all children, aged five to thirteen, the right to universal education. Feminists campaigning for the inclusion of girls in education in this period based their arguments on educating for a gendered life role (Marchbank and Letherby 2014). For much of the late twentieth century, schools provided a gender-differentiated curriculum. School curricula and teaching materials depicted narrow notions of femininity; needlework and cookery remaining compulsory for girls until

the late 1970s (Marchbank and Letherby 2014). Girls were encouraged to follow domestic, service sector or secretarial roles and steered away from subjects such as science or maths (Pettigrew 2014). The introduction of the National Curriculum in 1988 had a significant impact on gender equity as it required all students to follow the same core subjects. Girls could no longer opt-out of or be discouraged from studying areas traditionally considered masculine (Pettigrew 2014). However, research suggests that when choice is reintroduced post-16, many young people revert back to sex-typed subject areas and courses (Marchbank and Letherby 2014). This may have some relevance to the persistent trend in A-level choice. The three main subjects studied by males are physics, maths and economics and the three main subjects studied by females are English, biology and psychology (Institute of Physics 2013). Consequently, these subject choices influence the careers young people enter. The Office for National Statistics (2013) report 82% of workers in caring and leisure services and 77% of administrative and secretarial workers are female and 67% of managers and senior officials and over 80% of science, engineering and technology professionals are male.

Robinson and Jones Diaz (2006) contend many teachers remain intent on equity strategies that attempt to challenge stereotypical barriers by expanding children's views about non-traditional roles and occupations. However, simplistic sex role theory approaches have not been particularly effective (Skelton 2002). Instead, a more critical style of thinking is required. Robinson and Jones Diaz (2006) urge educators to introduce children to the concept of gendered power relations, whilst Norwich (2013) calls for the rejection of over-simplified explanations and warns against viewing polarised concepts (e.g. males and females) as oppositional positions. Perceiving boys and girls as two homogenous groups is problematic as the differences within gender categories may be greater than those between them (Sundaram 2010) and, the intersectionality of other social identities adds to the complexity.

Long standing societal norms and traditions are difficult to change. Thus, despite decades of research and policy there is a need for continued research, reflection, debate and intervention into how far on we are in ameliorating gender binaries in this phase of schooling. This paper gives consideration to the way in which gendered identities are constructed and challenged by teachers and children; particularly gendered expectations which relate to classroom behaviour, curricular preferences and career pathways.

Methodology

This small-scale study, which drew upon an interpretive-deductive paradigm, was conducted during the spring term of 2014. Using multiple methods of inquiry, it focused on one small primary school situated in a rural location within North Wales. The school, which educates pupils between the ages of three and eleven, had 76 pupils on roll. All pupils were from White British backgrounds, for whom English or Welsh was the first language. With only 1.5% of pupils entitled to free school meals, the surrounding area is not considered affluent or economically disadvantaged (Estyn 2012). Out of a team of four teachers, one was male and three were female (this included the female head teacher). The three classroom assistants were all female and the music teacher, who visited the school once a week to work with Key Stage 2 children (aged 8-11 years), was male.

Research was undertaken within a combined class of twenty children, containing Year 5 (two boys and seven girls) and Year 6 (seven boys and four girls) pupils. The four adult participants, all of whom worked within Key Stage 2, included Mr. A the Year 5/Year 6 class teacher; Mrs. J the teaching assistant attached to the Year 5/Year 6 class; Mrs. K a Year 3/Year 4 teacher; and Mr. B a music teacher. The confidentiality of the practitioners' and pupils' responses has been assured through the use of pseudonyms. Before any research was undertaken participants were informed about the purpose of the research, how their responses would be used and they were made aware of their right to withdraw from the study at any time. It is important to consider the impact that informing the children and practitioners of the gendered nature of the study may have had in shaping the conversations; the participants may have automatically focused on gender binaries, causing some responses to be homogenous.

Unsystematic observations were undertaken on a daily basis within the Year 5/Year 6 classroom and notes recorded into a fieldwork journal at the end of the school day. Observations were taken of discussions and interactions between pupils and amongst staff and pupils. Details of the

learning environment which related to gendered information were also documented. During the observations a participant-observer style was adopted which helped to minimise the disturbance to the natural interaction in the classroom (Lodico et al. 2010). Adopting the role of classroom assistant meant a good rapport was established with the children and practitioners before commencing discussions. It also provided a deeper insight into their experiences.

Ten discussion groups (five pairs of boys, four pairs of girls and one group of three girls) were completed with the children, with no correspondence of year group. Discussions took place within the classroom and were recorded in note form. During the discussions, careful consideration was given to the open-ended, free sequence questions asked of the children so that they could be understood, and did not lead or influence in anyway. Constant checks were made to ensure that what had been written captured the views of the children. Questions asked included: What are your favourite/least favourite subjects? If you were of the opposite sex, would like these subjects? Is one gender better at certain subjects? Why do you think this is the case? Does one gender answer the teacher's questions more? If so, why is this the case? How do girls/boys behave in the classroom? Why do you think this is? What job would you like to do when you are older? Why would you like to do this job?

Semi-structured interviews, which were digitally-recorded, were employed to interview Mr. A and Mrs. K. Questions asked included: Do you take gender into consideration within your classroom/ when planning? If so, in what way do you do this? Why do you feel this is necessary? How do girls/boys behave towards their learning/in the classroom? Is it easier for one gender to engage in school work? If so, why do you think this is? Do you think that girls/boys are impacted in any way within primary schools because of their gender? If so, in what way are they impacted?

Data was analysed using Thomas' (2006) general inductive approach. The first stage involved reading and re-reading individual transcripts for implied meanings which were considered to be related to the objectives of the study. The second stage involved collating individual responses under each open-ended question, coding respondents. The third stage involved highlighting and coding words or statements that appeared to 'fit together' (i.e. they involved similar ideas, attitudes, thoughts and feelings), leading to emerging themes. Once identified, the themes and sub-themes were scrutinised for patterns and relationships. Alternative and isolated perspectives were also noted. Data gathered is presented in narrative form; in correspondence with the main themes that have emerged and their relation to extant literature. As this study is based on one primary school, involving twenty four participants only, it does have its limitations, in that the findings cannot be generalized to other settings. A future study would need to involve a greater number of schools, representing a wider socio-economic and cultural context. However, by providing a rich specific account it may encourage practitioners, functioning in comparable contexts, to reflect on their practice leading to increased insight of similar phenomena (Hamilton 2013).

Findings and Discussion

Through critical analysis of the unsystematic classroom observations and discussions held with the children and practitioners, three central themes emerged – gendered binaries and stereotypes continue to influence learners' attitudes towards social behaviours within the classroom; engagement with school work; curricula interests and career aspirations.

Throughout the fieldwork an essentialist discourse transpired in the children's attempts to mark the distance between masculinities and aspects of femininity. Words used by the girls to describe the behaviour of the boys within the classroom: 'loud', 'naughty', 'silly', 'don't listen', 'cheeky' 'easily distracted', 'can't sit still' and 'interruptive', positioned the boys as having an indifferent or rejecting attitude towards school and school work. When questioned as to why they believed the boys acted in this way, six out of eleven girls suggested it was 'because they were boys'. Although the boys generally identified girls as being school-engaged, using words such: 'confident', 'sensible', 'modest', 'quiet', and 'better listeners', not all terms used by the boys to describe the behaviour of the girls were endearing. Deficit labels positioned girls as 'controlling, nicey-nicey, perfectionists'. When asked why they believed girls acted in this way five of the nine boys claimed 'because they are girls'. Although many children drew upon biological explanations to justify oppositional patterns of behaviour among girls and boys, it should not be assumed that all children

accept dominant discourses. Girl 5 reveals her discontent for teachers who identify boys as being physically stronger than girls.

Constant reference was made to different ways of 'doing masculinity'. As evidenced from the extracts outlined, essentialist language emerged, particularly from the boys, with many having told stories about their own misbehaviour and that of their male classmates. The boys' discourse centred on a traditional form of gender binary, which positions masculinity as 'active, tough and free'; characteristics which some boys perceived as being an integral part of 'normal' for *proper men*.

> Boys are silly and stupid in class (Boy 1)
> Yeah, really naughty (Boy 2)
> Why are they silly and naughty? (Researcher)
> Because we aren't scared of the teachers (Boy 1)
> We are active and we don't care what we do. Most boys do what they want (Boy 2)
> Why do they do what they want? (Researcher)
> Because they are *proper men* (Boy 2)
> Because they think they are tough (Boy 1)
>
> Girls behave much better. They sit down and work. Boys can't be bothered (Boy 3)
> Why do you say that? (Researcher)
> Most boys here are naughty. School is boring. *Girls are opposite* to us (Boy 3)
> Yeah, girls are teachers' pets. They act all nicey-nicey and do stuff to get a token or pupil of the week (Boy 4)
> They're more sensible but *they're not free* (Boy 3)
> Why do you say that? (Researcher)
> Boys are more free because they are not afraid to speak their mind (Boy 3)

The girls also discussed ways in which boys displayed their masculinity.

> Boys don't have any feelings (Girl 1)
> Why do you think that? (Researcher)
> They do stuff without thinking about other people's feelings (Girl 1)
> Because they are always trying to be cool (Girl 2)

Mr. A (class teacher) regularly talked about the 'bravado' persona that many Year 6 boys were, in his opinion, keen to embrace. Fitting in with the same-sex peer group is a common concern during middle childhood, so much so that some children conform strictly to gendered expectations (Yunger et al 2004). Many boys were keen to position girls as *opposite* to male learners. This supports the work of Oates and Skelton (2013) who assert the most significant factor explaining boys' underperformance is to do with self-image; for some boys measuring up to be a 'proper boy' means demonstrating opposing characteristics to everything female. Even boys from middle class backgrounds, who are academically achieving, have been found to joke around in class in order to deflect away from their attainment (Mills and Keddie 2007) in fear of being seen as hard-working. There has been considerable debate of the impact of masculinity upon boys' education. However, such discourse, which frequently positions boys as 'victims', does little to resolve the perceived problems (Marchbank and Letherby 2014) and prevents appropriate consideration being given to the interplay of gender and intersectionality. Rather than focusing on *which* boys are more at risk of performing 'macho masculinity' at school, more attention should be placed on identifying factors which help male learners resist pressures of conforming to rigid ways of 'doing' masculinity.

Competitiveness, another characteristic associated with how masculinity is performed at school (Barnes 2011), was also evident through the discussions held with the children. Upon asking who responded most to teacher questioning, seven of the nine boys and six of the eleven girls stated it was usually the boys, three girls said it depended on the subject and two girls and two boys said they were unsure. Not one of the twenty children replied that girls responded the most to teacher questioning. The fact that girls were not mentioned supports the findings of previous research which has shown how many teachers engage boys more in lessons than girls (Pettigrew 2014), contributing

to boys' verbal dominance within classrooms (Legewiea and DiPretea 2012). Reasons provided by girls and boys as to why boys were perceived to be the dominant responders included: boys like talking; boys have more ideas; they put their hand up more; boys get the answers right; and they need to prove how good they are. Such eagerness, to make positive contributions within the learning environment, appears to be at odds with the 'uncool to work' attitude (Sundaram 2010; Oates and Skelton 2013) associated with the masculine school identity many boys are keen to adopt. For some boys, the desire to speak their mind, in order to be a 'proper man', might supersede the desire to appear school indifferent or rejecting; it may offer another explanation for the verbal dominance by males within the classroom.

> If we beat the boys we don't care but they make a really big fuss (Girl 3)
> Why do they make a fuss? (Researcher)
> Because boys want all the attention (Girl 3)
> They always want to win. To beat the girls to show people how good they are (Girl 4)

> Girls are annoying. In the past *girls were seen as second class citizens* (Boy 5)
> *You want to go back to that*? (Boy 6)
> No but girls try to take over too much and control everything (Boy 5)
> Why do you say that? (Researcher)
> Because they like to be perfectionists (Boy 5)
> Yeah, they do their work and think that they are better than the boys (Boy 6)

The emphasis placed by some boys on criticising the practices, and identities of girls, suggests traditional modes of masculinity continue to exist within the primary classroom. As argued by Barnes (2011), this narrow and conformist discourse limits the range of gendered behaviours available to boys, problematizes and devalues those practiced by girls, and supports the existence of an essentialist gender binary which positions masculinity and femininity as functioning in opposition to each other. However, the tension between Boy 5 and Boy 6 about girls being 'second class citizens', suggests there has been some advancement in gender equity within society which some children are aware of.

When practitioners were asked if gendered stereotypes were observed amongst the children in their classrooms, they believed it not to be a problem, as addressing gender binaries was a key priority of the school. However, the unsystematic observations and the extracts which follow, illustrate how some practitioners, continue to reinforce traditional gender roles and stereotypes through the essentialist language they use, their behaviour and expectations.

> If a boy falls over a lady teacher would say 'Oh sweetie, have you cut your knee?' But a man teacher would say 'Man-up, go and get an ice-pack' (Boy 7)

> It really annoys me when the boys are always asked to get the PE things out. Mrs. L comes to the class and always says *'Can I have some strong boys to get the PE equipment out when some of the girls are way stronger than the boys'* (Girl 5)

> Mr. B (music teacher) sits boys and girls at opposite sides of the hall. He asks the boys to sing a song. Once the boys have finished singing Mr. B says 'Now sing together. Boys with your strength and their sweetness (referring to the girls) it will sound lovely.' At the end of the session Mr. B states 'Well done boys. You have surprised me. You did really well today and of course girls you have too, as always you work so hard'

> The children come out in small groups to undertake art work with Mrs. J. Three girls complain that the paint-brush handles are covered in so much paint their hands are getting dirty. Mrs. J responds 'That's the boys. You know how messy they are'

> Mr. A asks the class to copy a spider diagram from the whiteboard into their workbooks. Sam (Boy 3) puts his hand up and says 'Can I take a photograph of it instead?' Mr. A replies 'No, you can't. You need to draw it. You're a typical boy, lazy'

Mrs. J is helping the children draft letters to pen-pals. Simon (Boy 8) makes an error on a word that has been corrected for him. Mrs. J says 'Simon, I have just corrected that with you. Did you forget? What are you like? Typical boy'

Stereotypical views of females and males dominated the practitioners' views of girls and boys, positioning them as binary opposites. Frequent comparisons were made regarding the behaviour and work ethic of boys to that of girls. Labels typically attached to boys: 'untidy, forgetful and lazy', implied boys' incompetence in their school work, attitude and ability. For girls, however, there was a constant expectation for them to 'work hard, behave and achieve'. The 'sensible girls' and 'silly boys' binary, frequently evidenced through teachers' discursive practices and which are often based on unexamined assumptions (Major and Santoro 2014), are damaging as they risk limiting the identity positions available to young learners. The deficit labels that practitioners attached to the boys did not go unnoticed by the children. All eleven girls and six of the nine boys mentioned boys' lack of listening and excessive talking during lessons; with Girl 5 and Girl 6 commenting how girls learn more because their teacher Mr. A 'said so'. Such labels, attached to male learners during middle childhood, could lead to some boys living up to their teachers' expectations of them (Bosker et al. 2010), influencing their outlook on learning and inhibiting achievement throughout compulsory education. If boys are regularly told how girls' work ethic is better, it may lead to a perception that boys do not normally care about school work. It is important that where reference is made to gender differences, it is done in ways that do not involve essentialist discourses or are 'framed within a competitive framework' (Mills and Keddie 2007: 340).

Consideration also needs to be given to the culture of 'high expectation' typically placed on female learners, as a group: how the constant expectation to behave and achieve, might impact them socially, emotionally and academically. Can all girls cope with such pressure? Where does it leave females who do not live up to these expectations? The expectation to academically achieve, in addition to interweaving social identity markers such as knowledge of youth culture, beauty and fashion, frequently leads to high levels of stress and anxiety, particularly for middle class girls (Skelton and Francis 2012). Moreover, postfeminist narratives which have constructed girls as independent, capable and successful subjects who are equal to or surpass boys (Pomerantz et al. 2013), may influence teacher assumptions leading to sexism within schools and classrooms. Mr. B showed that when girls are doing well this tends to be regarded as the 'norm' but when boys are trying and achieving their efforts are noted and celebrated more. Research suggests that successful girls are more likely to be described as hard-working, while boys are more likely to be described as innately clever but unwilling to work (Thompson 2011); nice girls are expected to be modest and downplay their achievements (Paechter 2007) and; the behaviour of girls who rebel against school rules to be more negatively interpreted by teachers than when boys display similarly subversive behaviour (Sundaram 2010).

Comments made by the children imply how traditional gender binaries continue to influence the curricula and career interests of both girls and boys. Nine out of the eleven girls identified careers in care related professions: animal care (six); teacher (two); doctor (one); lawyer (one); gymnast (one). The boys (some of whom stated more than one career) tended to choose traditional male-dominated professions: police/rescue officers (four); football or rugby players (four); farmers (three); doctor (one); lawyer (one). The high level of interest expressed in working with animals, by girls and boys, is perhaps reflective of the rural locality of the school and the fact that some children came from farming families.

Many of the children had fixed attitudes regarding school subjects that girls and boys prefer and are good at. Discussions revealed subjects most enjoyed by the girls included history, art, gymnastics and dance, whereas the boys preferred practical activities such as Design Technology (DT) and Physical Education (PE) (in particular, rugby and/or football). Although the results are based on a small group of twenty children, there was a general perception of boys being better at outdoor sports (13 children) and girls being better at literacy (9 children). It is widely recognised that, as a group, boys tend to underperform at, and often dislike, English and literacy work (Smith 2012). The main argument for boys' disinclination is that these subjects are passive, and also, place emphasis on emotional and creative aspects (which are associated with 'feminine' characteristics) (Skelton and Francis 2012). It is also important to consider the comments made by the children in light of

intersectionality. Traditional occupational gender binaries might explain why some children, such as Boy 4, may have a clearly defined image as to what they perceive as jobs/responsibilities for males (e.g. males from farming families are more likely to operate heavy machinery).

> Girls are better at any subject to do with language or writing (Boy 3)
> Why is this? (Researcher)
> Because most girls like to sit down and do loads of writing (Boy 3)
> Yeah, boys are better at hands-on things like sports and DT (Boy 4)
> Are there any reasons for this? (Researcher)
> No, it's the way it has always been (Boy 3)
> *I don't wanna sound sexist* but you see the image of a housewife and see girls can't do DT because *that's boys' work* (Boy 4)

> Girls are good at almost everything (Girl 5)
> Why do you say everything? (Researcher)
> Because we actually listen and learn more. Mr. A said so. (Girl 5)
> In gymnastics we are more creative but boys are better at rugby and football (Girl 6)
> And science (Girl 5)
> Why do you think they are better at science? (Researcher)
> Because boys like doing fun things and *they just know more* (Girl 5)
> Yeah, it's like how girls are better at gym, ballet and dance (Girl 6)

The unsystematic observations and comments made by some practitioners, showed how gendered subject binaries and career pathways also risk being reinforced by teachers.

> Boys love anything practical, science, technologies. They are very advanced on the computers, anything other than putting pen to paper. For girls it's the opposite. They love to sit and do creative writing, extended activities and research tasks. Boys find this difficult (Mr. A)

> Mr. A selects ten children to work with a female teacher on a sewing activity. He selects eight girls and two boys and states 'We'll send more boys after. I'm not saying girls are better at sewing than boys but well they just are'

> In a gymnastic lesson Mr. A demonstrates the pike position. He then observes the children. He states 'Point your toes like a ballerina. The girls are much better at this. Boys do we have any ballerinas?' The children laugh at his joke. A few minutes later Mr. A shouts 'Come on boys, the girls are putting you to shame. You're doing well boys but the girls are much more creative'

What influence do such messages have on learners? What about girls who do not enjoy sitting and writing but want to engage in more practical or scientific/technical areas of the curriculum? Are their interests catered for? Are they encouraged to participate in these areas? What about boys who do not enjoy or excel at traditional male-oriented sports? Do they risk being stigmatised as feminine? Are girls prevented from engaging in sports considered to be stereotypically for males? How does the humour used with boys affect their outlook on learning? Could humour inadvertently reinforce expectations for boys to act as class jokers, or cause them not to take certain parts of the curriculum as seriously as their female classmates? Marchbank and Letherby (2014) report how some male teachers feel pressured into performing aspects of normalised constructions of masculinity. Being able to engage in discussion about sport, along with humour, has been identified as being an important form of cultural capital for equipping male teachers to manage their relationships with boys (Martino and Frank 2006; Paechter 2007). However, there is growing criticism that authoritarian masculine modes of relating, can reinforce traditional versions of gender (Mills and Keddie 2007), exacerbating the problem of macho attitudes and laddish behaviour (Maynard 2005), contributing to the indifferent or school rejecting attitude of some boys (Cushman 2010).

Research suggests that where teachers do not expect learners to be interested in or good at a subject on the grounds of their gender they focus on the opposite gender, whilst steering girls and boys to 'appropriately gendered' subjects (Bloom 2014). Thus 'gender biased subjects' are perpetuated through gender performance, with many children aligning (or some in opposition) to dominant concepts of masculinity or femininity. The following extract shows how deeply embedded gendered binaries are within the discipline of science; with maths, physics and chemistry at risk of being perceived as masculine subjects.

> Mr. A identifies professionals he would deploy into space: mathematicians, physicians, aeronautical engineers, mechanics and doctors. Initially he refers to these professionals as male. '*He would be good at and have multiple qualifications in maths, chemistry, physics and mechanics. He may have a PhD in physics. He would have gone to medical school. He... But remember these roles could be done by a man or a woman.*' Once the children had completed their work, they discussed the profile of the professional they had created. Out of twenty pupils only four children referred to their character as being female (all were girls), the remaining sixteen pupils identified their professional as being male.

Mr. A's last statement '*but remember these roles could be done by a man or a woman*' is profound for, added almost as an after-thought, it could lead some children into thinking that it is unusual for females to be in these professions. This is of significance considering the disproportionate number of females studying physics and maths at A-level (Institute of Physics 2013). Paechter (2007:89) argues that boys continue to dominate science because the subject within schools remains 'structured by norms of masculinity'. This may influence the belief that boys are better at science because they 'know more' (Girl 5). Despite the work undertaken by some schools to break down gender binaries, it appears societal norms continue to have a powerful influence on subject choice.

Robinson and Jones Diaz (2006) report how issues related to gender equity, encompassed within a broad anti-bias school policy, can be overlooked. The following comment supports this, showing how some teachers suffer from 'gender blindness' (Skelton in Thompson 2011) in that they assume because the school is addressing gender bias it is unlikely to enter their own practice and classroom.

> There aren't many female scientists but science sets are always aimed at the boys and kitchen sets for girls. TV and toy shops have the biggest impact on girls and their future roles. In school we try to be inclusive (Mrs. K)

Comments made by some children (Boy 2 and Boy 4 who acknowledge the sexist statements that they make) suggest a shift towards gender equality, however, there is still much work to be done as ameliorating gender differences is an on-going, complex and challenging task.

Conclusion

Despite various policies and strategies aimed at addressing gender issues in schools, and the awareness of some children in the societal shift in gender equality, it seems that gendered dualisms remain prevalent in the primary classroom. The findings of this study have important implications for practice in that it has highlighted the problems, for both girls and boys, of thinking in reductionist and oppositional binary terms; how such philosophy shapes and risks limiting children's orientations towards learning, achievement, classroom behaviour, subject and career choices.

Gender binaries are so deeply rooted within dominant cultural and societal discourses that ways of seeing and doing gender become normalised within a community, making it difficult to think outside of this frame. The study has shown that some teachers suffer from 'gender blindness' (Skelton in Thompson 2011) and, where this is the case, the gender binaries and biases stakeholders bring with them into the classroom risk going unchallenged and even reinforced. More understanding is required about how some young learners are able to resist pressures of conforming to traditional ways of doing masculinity and femininity. The area of school girl sub-cultures also warrants further research, particularly the impact the culture of high expectation and conformity has on some female learners

and the subtle forms of sexism that girls continue to experience in the classroom. Such investigations, however, need to be situated within critical gender equity pedagogies and intersectional approaches.

How gender identity is perceived by practitioners and articulated into everyday policies and practices is key to the success of gender equity (Robinson and Jones Diaz 2006). Teacher education has an important role to play in preparing teachers with a critical orientation towards dominant discourses. There needs to be ongoing commitment from teachers to i) reflect on how their own gendered, social, religious and ethnic positioning may impact on learners; ii) consider the complex intersection of gender with other social identity discourses; iii) provide learners opportunities to explore how masculinities and femininities are constructed, the impact of power relations, and the limitations of essentialist binary discourse (Hamilton and Jones 2014).

This paper has aimed to encourage practitioners to maximise critical reflection about the complex ways in which gendered dualisms and hierarchies perpetuate and dictate relations and pedagogical practices, which limit experiences and opportunities for girls and boys. There is an urgent need for practitioners to become more reflexively aware of the constraints of normalised gendered discourses and to incorporate multiple ways of thinking, working and *doing* gender in classrooms.

References

Andrew, P. (2012), *The Social Construction of Age.* Bristol: Multilingual Matters.

Barnes, C. (2011), 'A discourse of disparagement: Boys' talk about girls in school', *Young*, Vol. 19, No. 1, pp. 5–23.

Bartlett, S. and Burton, D. (2011), 'The Influence of Gender in the Classroom', in Richards, G. and Armstrong, F. (eds), *Teaching and Learning in Diverse and Inclusive Classrooms*, pp. 54-64. Oxon: Routledge.

Bell, P. (2013), *A Teacher's Guide to Understanding the Disruptive Behaviour Disorders.* Bloomington: Author House.

Bloom, A. (2014), *Playing to type.* Available at http://www.tes.co.uk/article.aspx?storycode=6420270

Bosker, R., Boer, H. and Werf, M. (2010), 'Sustainability of teacher expectation bias effects on long-term student performance', *Journal of Educational Psychology*, Vol. 102, No. 1, pp. 168-179.

Coddington, T. and Wiebers, T. (2002), 'Kohlberg redux: Gender concept formation and cognitive processes in preschool children', *The National Honor Society in Psychology*, Vol. 7, No. 4, pp. 171-175.

Cushman, P. (2010), 'Male primary school teachers: Helping or hindering a move to gender equity?', *Teaching and Teacher Education: An International Journal of Research and Studies*, Vol. 26, No.5, pp.1211-1218.

Department for Children, Schools and Families (2009a), *The Gender Agenda: Final Report.* Nottingham: DCSF Publications.

Department for Children, Schools and Families (2009b), *Gender Issues in School: What Works to Improve Achievement for Boys and Girls.* Nottingham: DCSF Publications.

Department for Children, Schools and Families (2009c), *Gender and Education: Mythbusters.* Nottingham: DCSF Publications.

Devarakonda, C. (2013), *Diversity and Inclusion in Early Childhood.* London: Sage.

Estyn (2012), *A Report on School E.* Cardiff: Crown Copyright.

Featherstone, S. and Bayley, R. (2010), *The Cleverness of Boys.* London: A&C Black Publications.

Francis, B., Skelton, C., Carrington, B., Hutchings, M., Read, B. and Hall, I. (2008), 'A perfect match? Pupils' and teachers' views of the impact of matching educators and learners by gender', *Research Papers in Education*, Vol. 23, No. 1, pp. 21–36.

Gibb, S., Fergusson, D.M. and Horwood, L.J. (2008), Gender differences in educational achievement to age 25, *Australian Journal of Education*, Vol. 52, No. 1, pp. 63-80.

Gurian, M. (2011), *21st Boys and Girls Learn Differently.* Second edition. San Francisco: Jossey-Bass Publications

Hamilton, P. (2013), 'It's not all about academic achievement: supporting the social and emotional needs of migrant worker children', *Pastoral Care in Education: An International Journal of Personal, Social and Emotional Development*, Vol. 31, No.2, pp. 173-190.

Hamilton, P. and Jones, L. (2014), 'Illuminating the 'boy problem' from children's and teachers' perspectives: a pilot study', *Education 3–13*, published on-line: 08 April 2014, DOI: 10.1080/03004279.2014.903987

Institute of Physics (2013), *Closing Doors: Exploring Gender and Subject Choice in Schools*. London: Institute of Physics.

Knickmeyer, R.C. and Baron-Cohen, S. (2006), 'Fetal testosterone and sex differences in typical social development and in autism', *Journal of Child Neurology*, Vol. 21, No. 10, pp. 825-844.

Lander, V. (2011), 'Boys, girls, gender issues and achievement', in Knowles, G. and Lander, V., *Diversity, Equality and Achievement in Education*, pp. 81-96. London: Sage Publications.

Legewiea, J. and DiPretea, T. (2012), 'School context and the gender gap in educational achievement', *American Sociological Review*, Vol. 77, No. 3, pp. 463-485.

Lodico, M., Spaulding, D. and Voegtle, K. (2010), *Methods in Educational Research: From Theory to Practice*. Second edition. New Jersey: John Wiley and Sons, Inc.

Lyng, S. (2009), 'Is there more to "antischoolishness" than masculinity? On multiple student styles, gender, and educational self-exclusion in secondary school', *Men and Masculinities*, Vol. 11, No.4, pp. 462-487.

Major, J. and Santoro, N. (2014), 'Sensible girls' and 'silly boys': What do teachers need to know about gender?', *The Australian Educational Researcher*, Vol. 41, No. 1, pp. 59-72.

Marchbank, J. and Leterby, G. (2014), *Introduction to Gender: Social Science Perspectives*. Second edition. Oxon: Routledge.

Martin, J. (2012), 'Gender and education: continuity and difference', in Cole, M. (ed), *Education, Equality and Human Rights*, pp. 27-47. Third edition. Oxon: Routledge.

Martino, W. and Frank, B. (2006), 'The tyranny of surveillance: male teachers and the policing of masculinities in a single sex school', *Gender and Education*, Vol. 18, No. 1, pp. 17–33.

Maynard, T. (2005), 'The Context: A Problem of Gender', in Topping, K. and Maloney, S. (eds), *The RoutledgeFalmer Reader in Inclusive Education*, pp. 83-94. Oxon: Routledge.

Mills, M. and Keddie, A (2007), 'Teaching boys and gender justice', *International Journal of Inclusive Education*, Vol. 11, No. 3, pp. 335–354.

Murphy, P. and Elwood, J. (1998), 'Gendered learning outside and inside school: influences on achievement', in Epstein, D., Elwood, J., Hey V. and Maw, J. (eds), *Failing boys? Issues in gender and achievement, pp. 162-181*. Buckingham: Open University Press.

Norwich, B. (2013), *Addressing the Tensions and Dilemmas in Inclusive Education: Living with Uncertainty*. Oxon: Routledge.

Oates, T. and Skelton, C. (2013), The gender debate. *Independent School Parent*. Available at http://www.independentschoolparent.com/education-news/the-gender-debate

Office for National Statistics (2013), *Women in the labour market* Available at http://www.ons.gov.uk/ons/dcp171776_328352.pdf

Paechter, C. (2007), *Being Boys Being Girls*. Maidenhead: Open University Press.

Pettigrew, A. (2014), 'Gender and Education', in Curtis, W., Ward, S., Sharp, J. and Hankin, L. (eds), *Education Studies: An Issue Based Approach*. Third edition. pp. 141-154. London: Sage.

Pomerantz, S., Raby, R. and Stefanik, A. (2013), 'Girls run the world? Caught between sexism and postfeminism in school', *Gender and Society*, Vol. 27, No. 2, pp.185-207.

Robinson, K. and Jones Diaz, C. (2006), *Diversity and Difference in Early Childhood Education: Issues for Theory and Practice*. Berkshire: Open University Press.

Ryle, R. (2015), *Questioning Gender: A Sociological Exploration*. Second edition. London: Sage.

Skelton, C. (2002), 'The 'feminisation of schooling' or 're-masculinising' primary education?', *International Studies in Sociology of Education*, Vol. 12, No. 1, pp. 77-96.

Skelton, C. and Francis, B. (2012), 'The renaissance child: High achievement and gender in late Modernity', *International Journal of Inclusive Education*, Vol. 16, No. 4, pp. 441–459.

Soylemez, A. (2010), 'A study on how social gender identity is constructed in EFL coursebooks', *Procedia Social and Behavioral Sciences*, Vol. 9, No. 1, pp. 747-752.

Smith, E. (2012), *Key Issues in Education and Social Justice*. London: Sage Publications.

Sundaram, V. (2010), 'Gender and education', in Arthur, J. and Davies, I. (eds), *Education Studies Textbook*, pp. 50-60. Oxon: Routledge.

Thomas, D. (2006), 'A general inductive approach for analyzing qualitative evaluation data', *American Journal of Education*, Vol. 27, No. 2, pp. 237-246.

Thompson, B. (2011), 'Reassessing gender issues in the primary classroom', in Knowles, G. (ed), *Supporting Inclusive Practice.* Second edition, pp. 46-62. Oxon: Routledge.

Yu, G. (2010), 'Gender bias', in Clauss-Ehlers, C. (ed), *Encyclopaedia of Cross-Cultural School Psychology*, pp. 472-495. New York: Springer.

Yunger, J., Carver, P. and Perry, D. (2004), 'Does gender identity influence children's psychological well-being?', *Developmental Psychology,* Vol. 40, No. 4, pp. 572-582.