How do primary children of different ages understand and encode gendered assumptions and stereotypes about their own and others' behaviour?

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Abstract

The following study considers the development of children's gender stereotypes within the context of a rural primary school in the South of England. It sets out to ascertain when children develop gender stereotypes and some ways that these assumptions are influenced. Focus groups were chosen from five year groups to participate in two specially chosen activities: a picture-matching activity in which children matched job roles to images of male and female faces; and a scenario based role-play exercise where children chose which roles they would play. The teacher, adopting a researcher-practitioner role, observed the children undertaking these activities and conducted semi-structured interviews in order to collect data representative of children's gender identity and gender stereotypes. Data revealed some common stereotypes that children held across the year groups. These findings also served as support for existing research, which indicates that the development of children's gender stereotypes occurs before the age of five and remains consistent throughout their primary years. Based on these findings, it is clear that teachers, parents, the media, the cultural presumptions of a community and the attitudes that exist in the world as a whole all have significant impact on the ways in which primary children encode gendered assumptions and stereotypes about their own and others' behaviour. According to the analysis contained herein, it is evident that teachers and schools could benefit from a continued awareness and understanding of gender stereotypes, whilst implementing strategies in the classroom and adjusting teaching practice to address issues of gender discrimination.

Introduction

Ideally, children would grow up in a world free of gender stereotypes. Such freedom would empower children to exhibit behaviour and learn skills that are entirely based on their personal preferences, devoid of the restriction that societal norms place on their gender (Bem, 1983; Kimmel, 2004; Wilbourne & Kee, 2010). However, as the following reveals, effective steps need to be taken in order to achieve this. This study will address the following two questions: '*When do children develop gender stereotypes?*' and '*What influences children's stereotypes?*'

Literature Review

'*Despite current applause for gender equality, children seem to be as stereotypically sex-typed as those of yesteryear.*' Joannie M. Schrof (1993)

This literature review aims to provide a clear picture of existing knowledge and theory surrounding children's development of gender stereotypes and gendered assumptions, albeit as part of a small-scale study. This will set a clear foundation for the research contained herein. Gender development is a '*ubiquitous and fundamental part of any child's development*' (Leman & Tenenbaum, 2011, p.153). Throughout children's development, gender stereotypes are acquired. Gender stereotypes are beliefs about personal attributes and often concern the ways men and women are categorised differently (Kollmayer, Schooner & Spiel, 2016).

What are the main gender development theories?

There are three main psychological gender development theories: social learning theory, cognitive development theory and gender schema theory. The *social learning theory* encapsulates the idea that gender is a social construct (Aina and Cameron, 2011) and that

gendered behaviours are learned from the environment, highlighting how media and important role models, such as parents and teachers, can reinforce behaviour. This theory links to Vygotsky's research implying how imitation and instruction are necessary components of children's development (1961). Adults encourage this learning to occur through modelling behaviour and providing cultural meaning for children. When young children are exposed to gender stereotypes, it influences their development of gender stereotypes (Bussey & Bandura, 1999). Within the social learning theory, there are two known mechanisms for the way that gender stereotypes and gendered behaviour is developed: children learn gendered behaviour by watching powerful, salient, attractive and same-gendered models (*modeling)*; alternatively, children are encouraged and rewarded for engaging in activities and behaviour that are gender-appropriate (*direct tuition)*. In accordance with this, children are also discouraged from gender-inappropriate activities (Coyne *et al.*, 2016).

As an alternative view to the social learning theory, gender development has been considered to be part of a *cognitive development theory*. Kohlberg was one of the first theorists to write about gender as a learned, cognitive concept. His ideas were influenced by Piaget's who proposed that children are active learners who interact with their environment to gain a greater understanding of the world around them (Piaget, 1961). Kohlberg believed that children's cognitive understanding of gender influences their behaviour (Aina & Cameron, 2011) and that a child's understanding of gender moves forward in stages. Children's cognitions of their own gender form a basis for 'gender typical' preferences, and this results in the belief that gender is stable over time (Kollmayer, Schooner & Spiel, 2016). This theory poses that the three stages of gender development are: *gender identity*, when a child can label their own gender; *gender stability*, when gender remains stable over time, although a child will still rely on external features such as appearance and clothes; and *gender constancy*, where gender becomes invariant despite changes in appearance or activity (Kohlberg, 1966; Bussey & Bandura, 1999). Kohlberg (1966) wrote the following to summarise a child's thought process that suggests how children's thoughts can become their gender identity: '*I am a boy, therefore I want to do boy things, therefore the opportunity to do boy things (and to gain approval for doing them) is rewarding*' (Kohlberg, 1966, p.89). When children make this connection, that is to say when children gain gender constancy, they begin to realise that their gender is invariant despite changes in appearance or activity (Bussey and Bandura, 1999).

The problem with these two theories is that they do not account for the process of gender typing: the acquisition of gender appropriate skills, personality attributes, behaviour and self-concepts (Kollmayer, Schooner & Spiel, 2016). *Gender schema theory* contains features from both of these theories. In cognitive development theory, Kohlberg posits that gender development is achieved by maturation. The child's age determines how they process gender. However, *gender schema theory* poses that gender development is a learned phenomenon and is neither inevitable nor unmodifiable; children play a more active role in their gender development. To understand this theory properly, it is necessary to define the term 'schema'. A schema is '*a cognitive structure, a network of associations that organizes and guides an individual's perception*' (Bem, 1981, p.335). Schemas are used to help people understand something by drawing upon past experiences (Peterson & Lach, 1990). Children observe their culture and align their own behaviour to fit with this, thus being crucial for gender typing. Gender schema changes over the course of a lifetime and children from the same culture often have the same gender schemas (Kollmayer, Schooner & Spiel, 2016). There are three main ways that children learn gender-stereotyped behaviour: observing models; receiving reward for their own gendered behaviour; and hearing instruction and approval from others (Murnen *et al.*, 2016). Often, even young children hold gender schemas about males and females (Peterson & Lach, 1990). Increased gender stereotyping occurs when these schemas are seen (Header & Kessels, 2015).

When do children develop gender stereotypes?

The early childhood years could be considered as foundational for the development of gender stereotypes (Coyne *et al.*, 2016). During infancy, children categorise things to make sense of their early environment by means of assigning gender characteristics and generating stereotypes (Hilliard & Liben, 2010). By the age of four months, infants can distinguish faces and voices by gender and by ten months they can make stereotypic gendered distinctions between men and women (Martin & Ruble, 2009). Children begin to show gender typical interests and behaviour from a young age, for example by the toys, clothes and colours they choose (Kollmayer, Schooner & Spiel, 2016; Karniol, 2011). By the age of two, children have a concept of gender (Wilbourne & Kee, 2010) and by age three they know their gender (Martin & Ruble, 2004). Between the ages of three and five, children are developing their gender identity and gender stereotypes, applying these to themselves and others (Aina & Cameron, 2011). At aged seven, these stereotypes are well-defined (Martin & Ruble, 2004). This is in line with Kohlberg's cognitive development theory.

<u>What influences children's stereotypes?</u>

Parents can have a strong influence on a child's gender development (Alanko *et al.*, 2011; Leman and Tenenbaum, 2011). Even before a child is born, gender socialisation takes place. By revealing the gender of the baby through ultrasound, parents' thoughts could result in stereotyped behaviour, for example when deciding on a colour for the nursery (Zulus *et al.*, 2011; Aina & Cameron, 2011). Before school, parents are acknowledged to be the most important socialising agents for children, since they model behaviour, share knowledge, set expectations and reward desired behaviour (Kollmayer, Schooner & Spiel, 2016). The impact made on a child's gender development will be strongest when parental and media messages support one another (Bussey and Bandura, 1999). Research suggests that media can reinforce gender stereotypes and convey powerful messages (Aina & Cameron, 2011), influencing male and female attitudes about gender (Bussey & Bandura, 1999; Coyne *et al.*, 2016) and in turn altering children's perceptions of gender appropriate toys and play. Coyne *et al.* (2016) in their study note how Disney has recently been criticised for trying to make characters more beautiful and portraying them with a need to be saved by men (see also Ehrenreich, 2007; Ornstein, 2011). In addition, stereotyped toys can have an impact on young children's play and this can affect their cognitive development since play is considered to be an important contributor of cognitive skills in children (Cherney, 2003).

Education can also impose gendered stereotypes on children. Particularly in early childhood, there are two main elements that contribute to gender development: classroom resources and the instruction of teachers (Gee & Gee, 2005). Finsterwald and Zielger (2007) conducted an analysis on classroom textbooks. They were particularly interested in researching the inferred messages contained within their pictures. Their study revealed that females were represented less than males. Furthermore, they found that females were depicted as being less competitive and willing than men, more likely to be represented in a family/household context and more submissive. On the other hand, there were more pictures of males in job settings and they were portrayed as being more willing and independent. In this case, textbooks were shown to impart socially shared cultural knowledge (Hintermann, Markom, Üllen, & Weinhäupl, 2014; Moser, Hannover, & Becker, 2013 *in* Kollmayer, Schooner & Spiel, 2016). As for teachers' instruction, Heller, Finsterwald, and Ziegler (2010) found, as expected, that teachers in a German school encouraged girls to pursue careers in education, languages or medicine, but they would encourage boys to pursue mathematical, engineering or technological paths (see also Kollmayer, Schooner & Spiel, 2016). Teachers can make a significant impact on the way children understand gender by having either gender-fair, or gender-congruent conversations with children (Aina & Cameron, 2011). Some research has noted that when children adopt gendered stereotypes teachers' perceptions are affected and their gender-stereotyped expectations increase (Header and Kessels, 2015). Well-informed teachers can help children to develop a positive sense of their own gender (Aina & Cameron, 2011). Zaman (2007) highlights that when teachers are familiar with the influences of gender

identity and stereotype development and understand how children are active agents (Brinkmann *et al.*, 2014; Kollmayer, Schooner & Spiel, 2016), they become more able to counteract and neutralise gender bias in their classrooms, thus preventing the development of children's assumptions and stereotypes about gender.

Finally, society and culture can have a large influence on children's gender-based assumptions and stereotypes. Some researchers suggest that generalisations form to categorise people to help tolerate differences in diverse societies (Keefe, Marshall & Robeson, 2003). This creates gender biases and therefore shapes children's attitudes, access to education, participation in work as well as physical and psychological well-being (Aina & Cameron, 2011). Society helps to socialise male and female infants into masculine and feminine adults (Bussey & Bandura, 1999). More often than not, children behave in the way culture defines as appropriate for their gender (Berenbaum, Martin & Ruble, 2008). The structure of society continues to be patriarchal, causing a gendered division of jobs and labour by sustaining the pressure to conform to stereotyped roles (Murnen *et al.*, 2016). Exaggerated gender stereotypes, promoted by culture, can affect children's gender-based stereotypes (Martin & Ruble, 2004).

This review has provided a brief overview of the main theories surrounding children's gender development. Children are active agents because gender is something a child learns by observing their surrounding environment. This belief is based on gender schema theory. This explains how children acquire gendered assumptions, but reinforces the idea that their ideas are neither inevitable nor unmodifiable. Whilst reviewing research, it was evident that there are limited studies involving children of different ages across primary school, thus making the research question for this study appropriate. The following two research questions will be examined during the rest of this study: '*When do children develop gender stereotypes?*' and '*What influences children's stereotypes?*'

Research Context and Methods

This section will set out the educational context in which the research took place and will examine the research methods used to gather data relating to the research questions (RQs) that emerged from the literature review. Important ethical considerations and limitations will also be discussed for each method.

Context

Research was conducted in a two-form-entry, above-average size First School (Years 1-5) in a small rural village in West Sussex. Most pupils live in the village and the vast majority have a White British heritage. The percentage of children eligible for free school meals is below national average (Ofsted, 2011).

Research design

The research design of this project is a small-scale case study. A case study can be described as:

> '…a research strategy with an empirical enquiry that investigates a contemporary phenomenon within its real-life context, when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence is used.' (Yin, 2008, p.18)

The research conducted in this project examines a limited number of variables and the methods chosen involve an in-depth, longitudinal investigation of a particular element in this educational setting, the case (Demetriou, 2013).

Ethical Considerations

The research for this case study was conducted in a way that conforms to the guidelines proposed by the British Educational Research Association (BERA). Responsibility towards and respect for all participants was maintained during and after research (BERA, 2011). Before conducting research, the nature and purpose of the study along with the methods were discussed with the Head teacher and written consent was gained. Informed consent was sought from all participants along with written parental consent. Participants were also informed of their right to withdraw from the study.

Sampling strategy

Collecting quantitative data from a sample (sub-group) that is representative of a population allows conclusions to be made about a whole population (Winterbottom, 2013). Participants for the study were randomly selected using a random number generator in order to obtain the most valuable data. Participants were selected from the whole population to create focus groups. There was a focus group (consisting of four children) representing each year group in the study (Years 1-5). The gender of the participants was considered to be a variable, so there were two boys and two girls in each group. Data generated from a focus group can be rich because there are more participants (Roberts and Copping, 2008). This ensured that the data and overall findings were significant.

Methods

The data collected in this project used a mixed methods approach. A mixed methods approach includes a combination of qualitative and quantitative data collection (Biesta, 2012). Qualitative research is based on data collected from probing people's beliefs, assumptions and understanding etc. to gain an understanding of the particular '*constructions, beliefs and understandings of the [subject] being researched*' (Evans, 2013, p.145). Quantitative research is based on collecting numerical data that can be statistically analysed (Angrosino, 2012) providing clear and succinct findings (Wellington and Szczerbinski, 2007). Focus groups were given a two-part task. In the first part, participants had a picture sorting activity where job titles needed to be assigned to images of people of different genders. The second part consisted of a role-play activity where the participants were given a scenario. This task involved participants adopting a role and enacting the scene described in the scenario. These activities were completed under supervision of the researcher and video recorded on an iPad to enable the researcher to check original observations more thoroughly as well as being able to consider non-verbal responses (Roberts and Copping, 2008). Group semi-structured interviews were then conducted to ascertain why participants had made particular decisions during the two-part observation task.

Observation

If the purpose of particular research is to gain understanding of a specific culture or group of people, the knowledge comes from observation (Greig *et al.*, 2013). Observation-based research is a well-established technique used in educational settings (Angrosino, 2012) and has been considered as one of the most powerful tools used in research (Burton *et al.*, 2008). Observation is a method used to record behaviour at certain times and contexts (Roberts and Copping, 2008), allowing the researcher to stand back and watch. It is especially helpful in providing rich data essential for drawing conclusions (Burton *et al.*, 2008) and for overcoming differences between what people say and what they do (Lawson and Philpott, 2008). There are different types of observation: unstructured (*looking at*: having an open-minded approach and recording everything) and structured (*looking for*: noticing specific things and making use

of coding systems) (Burton, *et al.*, 2008). This study makes use of the structured approach. During observations, the researcher's role was not to seek control of the tasks, but to observe what happens naturally when presented with certain situations. This type of research is also known as naturalistic observation (Angrosino, 2012). It is important for observers to minimise the influence they have on the participants' behaviour (Woodhead and Faulkner, 2008), as bias would influence decisions. Therefore, the researcher adopted an objective stance during the activities keeping utterances to a minimum. Naturalistic observations are particularly helpful when conducting research with young children (Gerig *et al.*, 2013). Often, when children are subjected to new, 'experimental' environments they say what is expected of them. However, observation offers simplicity that does not require children to talk about their thoughts and feelings; it is simply about watching and listening (Gerig *et al.*, 2013). The behaviour is seen through the researcher's eyes, with their particular biases in mind. Therefore, it is important to be objective and consider how interpretation of the behaviour could differ to what actually occurs (Roberts and Copping, 2008). Using observation as a research method does have limitations. Observations can be time consuming and subjective in interpretation (Burton *et* al., 2008). For this reason, the two activities completed by the children were brief, a total of ten minutes per activity. In addition, when analysing data, the researcher was aware of biases and considered alternative interpretations. Following a brief analysis of the children's behaviour, a semi-structured interview was conducted to explore children's choices.

<u>Semi-structured group interviews</u>

Interviewing can be a central method used in research (Greig *et al.*, 2013), especially for research that focuses on pupil perspectives (Warwick and Chaplain, 2013). One of the main advantages of using interviews as a way of collecting data as part of a study is its versatility (Burton *et al.*, 2008). The role of the researcher in focus groups is crucial to this method's success since they have a responsibility to provide structure for the activity and discussion, allowing the group to go off on a tangent whilst knowing when and how to return and reformulate views back in line with the focus (Roberts and Copping, 2008). The type of interview used in this research study was a semi-structured approach, using a set of standard questions, but the researcher was able to add questions in response to participants' answers, gaining more information (Roberts and Copping, 2008). This type of interviewing acknowledges the idea that the researcher did not know all of the right questions before starting (Lawson and Philpott, 2008). In this research study, the researcher identified a number of key questions that focused on the activity task which then acted as prompts (Burton *et al.*, 2008; Greig *et al.*, 2013), providing a starting point for discussion (Taber, 2013). The researcher began by leading the interview and then withdrew leadership as the discussions opened up. Questions provided an initial context, e.g. referencing something that occurred during the activity tasks, and then provided opportunities for the children to take their response down different avenues (Mears, 2012; Morrissey, 1987). There are several limitations when using interviews. Interviews require patience, demanding considerable time and energy (Mears, 2012). Vast amounts of data produced can be challenging to process (Lichtman, 2006). However, when conducted well, the results can be fascinating (Greig *et al.*, 2013). Interviews are often unpredictable, participants may not give expected answers and they may need to be postponed or cancelled. Although, dedication to the research will ensure that valuable findings can be shared with others (Mears, 2012). The children were being interviewed in groups. This can lead to children giving answers in an attempt to win favour with their peer group (Scott, 2008) though, as is often the case, children are often more comfortable talking to a researcher (Taber, 2013).

Findings and Analysis

This research project took place in order to find out when children develop stereotypes and what these stereotypes are. This section will demonstrate a synthesis between the theories

discussed in the literature review and data collected that relates to these specific themes. Overall findings coincide with literature, suggesting that gender stereotypes develop before the age of five. There seemed to be no direct correlation between children's ages and types of stereotypes; the stereotypes held were generally similar across the year groups and the children responded to the activities in much the same way and came to similar conclusions.

When do children develop gender stereotypes?

Existing research indicated that the foundation for the development of gender stereotypes starts in the early childhood years; infants as young as four months can distinguish faces and voices by gender. Interestingly, literature revealed that by the age of seven, children's stereotypes about gender are well defined. It was expected that this would have implications for this research project. The children that participated in the research were aged five to nine. So, in line with previous research, it was assumed that the children participating would have strong stereotypes. The data is consistent with Aina and Cameron's (2011) research in that it was clear that children in Year 1 were developing their gender identity and gender stereotypes and applying these to themselves and others. The table below (Fig. 1) shows this:

	Scenario 1	Scenario 2
Name	**Role**	**Role**
Kia	Nurse	Teacher
Zoe	Receptionist	Headteacher
Jonny	Doctor	Parent
Daimen	Receptionist	Builder

Fig. 1: Table showing the roles adopted by Year 1 children during role-play scenarios

If these activities, or similar, were conducted with younger children, results may have differed. However, in line with Kohlberg's cognitive development theory (Kohlberg, 1966), it is possible to conclude that the stereotypes and gendered assumptions most of the children held were preconceived assumptions and had developed and cemented prior to the research sessions (Martin & Ruble, 2004; Coyne et al., 2016).

What influences gender stereotypes?

As well as reflecting on this question, the remainder of this section will also consider some of the
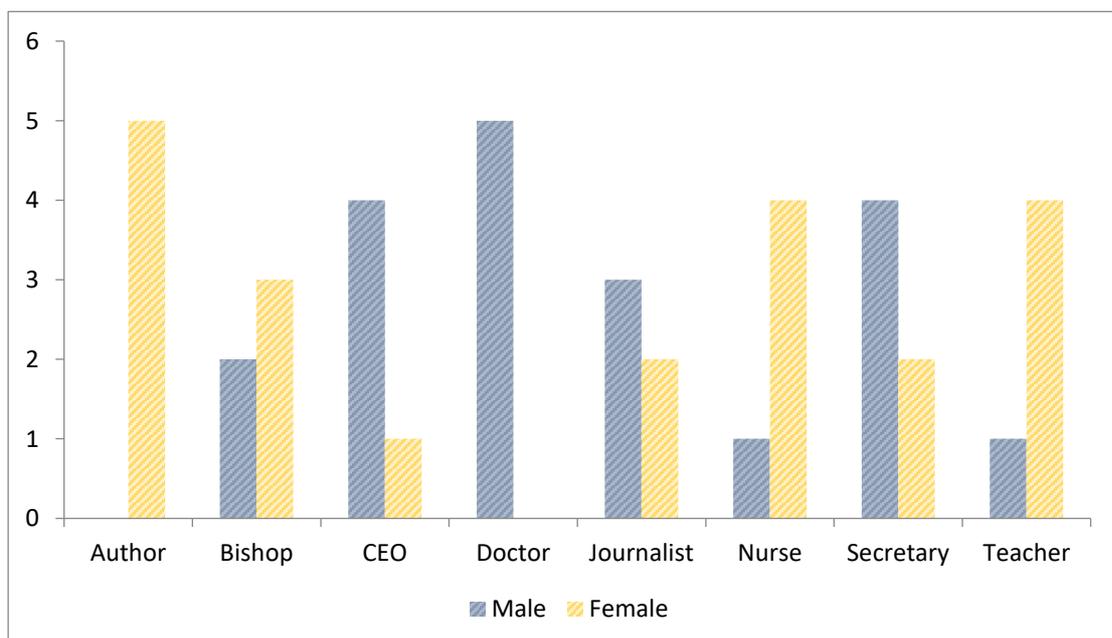
stereotypes that the children in this study held. For example, Fig. 2 (below) shows which genders the children, across all five year groups, assigned job roles to. As might be expected, the doctor, journalist and CEO have mainly been assigned as male roles, whereas author, nurse and teacher have been assigned as female roles. Interestingly, the results for bishop and secretary could be considered to challenge stereotypes.

Fig. 2: Table showing the gender that children assigned roles to in picture-matching activity

Pertinent literature referenced three main influences on children's gender development: parents; education; and society and culture. The remainder of this section will discuss the data in relation to some of these influences. For some of the children that participated, their knowledge and understanding of the roles that different genders play were attributed to their understanding of the jobs that their parents had. For example, when discussing the role of a CEO, one child talked about their father being a '*big boss*'. This information helped their group come to the conclusion that the 'CEO' title should go next to the man who looks '*bossy*', wearing a suit and a smart tie. Another child commented that their mother was a nurse and that she was a very smiley person. Thus, the group deduced that the nurse must be a smiley woman. This information supports the notion that parents are important socialising agents for children because they model behaviour and share knowledge; this is in line with the results found in Kollymayer, Schooner and Spiel's research (2016).

Previous research highlighted the influences that the media can have on creating or reinforcing stereotypes. The data collected from this study did not specifically reveal children's choices being made as a result of this. During the matching and role-play activities, none of the children made a reference to any form of media. This is contrary to most literature (Aina & Cameron, 2011; Coyne *et al.*, 2016; Bussey & Bandura, 1999). Although, in these existing studies, media influences were categorically being tested. Equally, references were not made to any stereotyped toys that could have had an impact on the children's decision making (Ehrenreich, 2007; Ornstein, 2011; Cherney, 2003). However, if costumes or toys were available for children to use during the role-play activity, this may have been different (Cherney, 2003).

The children participating in this study all lived in the same area, went to the same school and received a similar education. Therefore, it could be said that they were influenced by the same society and culture. Society and culture, as recognised in the literature review, can have a large influence on children's gender-based assumptions and stereotypes (Aina & Cameron, 2011). During this study, there were two roles that consistently stood out by revealing the typical gendered assumptions and stereotypes that the children had. These roles were a 'doctor' and a 'nurse'. As Fig. 2 shows, all five year groups assigned the role of a 'doctor' to a male picture and four groups assigned the role of a 'nurse' to a female picture. Generally, data did not reveal a relationship between the gender of the child and the opinions they held about whether a female could/could not be a doctor or that a male could/could not be a nurse. Interestingly, the data also did not reveal that as the children got older, their opinions changed (apart from the openness to changing opinions in Year 5, but this will be discussed later). Usually in each group there was clear consensus when making decisions. However, where there were disagreements it was often one child's opinion against the rest of the group. Often, in most of these cases, this child would end up settling and agreeing with their peers. During this exchange with the Year 1 group, the children were deliberating which picture should be matched to the title 'nurse':

> Researcher: 'Which one is the nurse?'
> Jonny: [Points to the picture of the male wearing a blue shirt]
> Zoe: [Looking at Jonny and then researcher] 'A nurse is not a boy!'
> Jonny: [Pointing to the same picture] 'This one's the nurse.'
> Kia: 'Yeah, that one.'

[Children match up pieces of paper]
Zoe: 'It looks like a doctor.'
Jonny: 'No, nurse.'
Zoe: [Under her breath, looking at the floor] 'I think nurse is a girl though.'

Interestingly, in this exchange, Zoe was suggesting that the man was a doctor long before the children were told that there was a piece of paper saying 'doctor'. This is similar to a Year 2 exchange where a female reinforced the stereotype that men were not usually nurses since it was 'more likely' that a woman would be a nurse. Both of these exchanges show examples of children endorsing gendered assumptions. Whereas, in a Year 3 class, one girl was trying to express that she disagreed when the rest of her peers were supporting stereotypes. She used two opportunities to try to convince the others to change their minds, but perhaps she was not authoritative enough. However, this could be because there was one girl in this group of three. Usually, during the activities the children would support the other child in the group of the same gender. The Year 3 group was made up of two boys and one girl and this could have affected decision-making. The exchange below is taken from an interaction where the two boys were supporting one another and the girl was taking a more submissive, quieter role despite having an opinion that she wants to express. In this group, one boy took the lead and made the majority of the decisions:

Izzy: Lucas who about the picture [Interrupting was talking woman in the looking friendly] 'I think she looks like a doctor because she looks really healthy.'
Researcher: 'Why does she look like a doctor?'
Dan: 'Because she's a nurse not girl!'
Lucas: 'She has very long hair.'
Izzy: [Under her breath] 'Girls can be doctors.' [No one heard Izzy or commented; this comment was only picked up when transcribing the session.]

	Gender of child			
Role	Male	% (2dp)	Female	% (2dp)
Nurse	0	0	3	100
Doctor	4	100	0	0
Receptionist	2	33.33	4	66.67
Patient	3	100	0	0
Cleaner	0	0	1	100
Caretaker	0	0	1	100
Teacher	1	16.67	5	83.33
Headteacher	3	60	2	40
Parent	1	100	0	0
Builder	1	100	0	0
Deputy	1	50	1	50

Gendered assumptions were not only portrayed in the picture-matching activity. During the role-play activity, the children adopted roles in line with expected stereotypical roles. This is shown in Fig. 3 below:

Fig. 3: Roles children adopted in role-play activity

One interesting thing to note here is that the roles the children adopted followed a similar pattern; male children were more likely to adopt more stereotypically male roles and female children being more likely to adopt more stereotypically female roles. Often, these choices were encouraged by their peers. An example of this occurred in the Year 5 session. Simultaneously, one girl and one boy both volunteered to be the doctor (to perform the operation on the patient). Another boy looked across at the girl and then looked back at the boy before announcing: '*No, I think Ben should do it.*' These findings support the notion that the structure of society remains patriarchal, highlighting the gendered division of jobs and the pressure to conform to stereotyped roles (Murnen *et al.*, 2016).

It is important to consider context when analysing the data collected from this study before reaching any conclusions. The Year 5 group was the only year group who said that the teacher could be male. This could be due to various factors, but is most likely to be because they are the only year group in the school to have a male teacher. This was also the only group to state that they were probably wrong with many of their matches in the picture-matching activity, possibly because they were more willing to have their opinions challenged and stereotypes confronted. One of the likely reasons for this was that Year 5 had recently had an equality and diversity day where they had completed similar activities. One child commented: '*Because with [our teacher], we were thinking 'this is this' and 'that is that' and we got it all wrong.*' In this case, the children's teacher was familiar with the influences of gender identity and stereotype development (Zaman, 2007) and was able to implement strategies that could help challenge these (Brinkmann *et al.*, 2014; Kollmayer, Schooner & Spiel, 2016).

Conducting semi-structured interviews did not create a separate activity. Rather, it gave the researcher the ability to question some of the children's choices. Often, when correct matches were revealed to the children they were surprised. A semi-structured interview allowed the researcher to probe the children's thoughts. For example, in the following exchange, a group of Year 4 students expressed why they were surprised that the nurse was a male:

> Alice: 'I thought the nurses were just ladies.'
> Sam: 'That's just weird.'
> Researcher: 'Sam, why is that weird?'
> Sam: 'Because I thought the doctor was going to be a boy.'
> Researcher: 'Why did you think that the doctor was going to be a boy?'
> Sam: 'Because the doctors are boys.'
> Jack: 'Some nurses are the boys.'
> Poppy: [Talking to Sam] 'No, they're not. Not just doctors are boys. There can be girl doctors.'
> Jack: 'There can be boy doctors and girl doctors and there can be boy nurses and girl nurses.'

A similar interaction occurred in the Year 3 session. At the end, there was a clear moment of realisation when they came to the same conclusion as Poppy and Jack in the exchange above. They were then able to draw on their previous personal experience and mention that their own GP at the surgery '*down the road*' was a female.

The children's consideration of the person's gender was not the only factor that helped the children to decide how to pair the pictures and job titles. They commonly considered the person's attire. Despite using photographs that did not necessarily provide hints, all five groups used uniforms to help match jobs like 'doctor' and 'CEO'. In Year 2, there was an

interesting discussion when the children found out who the doctor was. They were more surprised that she was not wearing a uniform than they were that she was a female.

Influences such as media were not seen to directly impact the children's choices. On the other hand, the influence that parents and teachers can have was. It is clear that teachers play an important role in positively challenging children's stereotypes.

Conclusion and Recommendations

The aim of this case study was to discover whether there was a relationship between children of different ages (ages 5-9) and the stereotypes they held. This was explored through the following two RQs: '*When do children develop gender stereotypes?*' and '*What influences children's stereotypes?*' Focus groups, consisting of two boys and two girls, were formed in five year groups: Years 1-5. The study enabled children to participate in activities as the teacher took on an observational role; this was followed by semi-structured interviews. The data collected from these methods was analysed in order to substantiate findings. Although this study provoked helpful and enlightening answers to these questions, this is a conflicting and complex topic, which requires further research.

Although findings were limited due to the small sample size and time constraints that restricted the types of methods the researcher could use, the research is compatible with Kohlberg's cognitive development theory as highlighted by research from Aina and Cameron (2011) who suggest that between the ages of three and five, children are developing their gender stereotypes, applying these to themselves and others. The assumptions held by the children during the study were also well defined when the children were about seven years old (Martin & Ruble, 2004). Data from the activities revealed that children held gender stereotypes. During the picture-matching activity 80% of the groups decided that CEOs were male, 80% of the groups expressed that nurses are female and 100% of the groups came to the conclusion that doctors are male. These results are in line with expected findings (Kollmayer, Schooner & Spiel, 2016). However, context needed to be considered with some of the decisions children made so as not to come to premature conclusions. For example, four out of the five focus groups matched the teacher role with a female person. Interestingly, a female teacher usually taught these four groups and a male teacher teaches the group who matched the role to a male person. Therefore, when considering contexts, different conclusions could be reached and this highlighted the importance of being tentative with some of the findings revealed in this study. In this instance, the gender of the teacher influenced the way in which the children assigned roles in the picture-matching activity; however, more broadly, as was indicative in the analysis, the teacher's instruction and modelling could have a specific bearing on children's gender-based stereotypes.

Findings revealed that the children in this study had developed existing stereotypes before the study took place, suggesting that stereotypes are in fact developed before the age of five, as previous research indicated (Kollmayer, Schooner & Spiel, 2016; Karniol, 2011). Although only a small proportion of the children in the school participated in this research, the results are still valuable and would reflect the overall attitudes in the whole school. The study's findings could be said to reflect the general circumstances in a wider sense beyond this setting, thus making it externally valid; hence, the findings could be applied to other settings. However, a larger study, across a wider age range of children from different areas, would be useful in order to gain more interesting and reliable results. Although this study has not drawn any explicit conclusions regarding the age at which children begin to develop gender stereotypes, it has revealed that children acquire gender stereotypes at some point prior to the age of five and that their observations, thoughts and opinions relating to gender identity remain consistent throughout most year groups; however, it could be said that in Year 5, despite holding to the same gender stereotypes, the children were able to discern that their ideas were stereotypical and morally dubious. As was mentioned in the previous paragraph, this could be attributed to

the role of the teacher and, more specifically, the children's involvement in an equality and diversity day.

Some initiatives could provide a constructive and influential platform to effectively challenge children's existing gender stereotypes. As previous research highlighted in the literature review, stereotypes are often developed in early childhood and become part of a child's cognitive development as they begin to understand their own gender and the behaviour of others around them. Therefore, changes could be made to ensure that these stereotypes are challenged in order to confront the all-pervasive impact that a patriarchal society can have. Thus, it could be stated that ongoing opportunities akin to an equality and diversity day would encourage a more diverse and egalitarian approach to gender identity. In order for gender stereotypes to be challenged effectively, parents, teachers and schools ought to have an increased awareness of the impact such stereotypes can have on children and their behaviour. By reviewing the way these assumptions are handled on a day-to-day basis, teachers might decide to implement changes. For example, deciding to intervene in instances of gender discrimination; teachers should feel empowered to confront these. The media, the cultural presumptions of a community and the attitudes that exist in the world as a whole all have a significant impact on the development of children's gender stereotypes; with this in mind, although this study has highlighted some interesting observations, it is clear that the issue of gender identity far extends the scope of this enquiry and its consequent recommendations.

Reference list

Aina, O. and Cameron, P., (2011) 'Who does gender matter? Counteracting stereotypes with young children', *Dimensions of Early Childhood*, Volume 39, Number 3, pp. 11-19.

Alanko, K., Santtila, P., Salo, B., Jern, P., Johansson, A. and Sandnabba, N., (2011), 'Testing causal models of the relationship between childhood gender atypical behaviour and parent-child relationship', *British Journal of Developmental Psychology,* Volume 29, pp. 214-233.

Angrosino, M., (2012) 'Observation-based research', in Arthur, J., Waring, M., Coe, R. and Hedges, L., (Editors), *Research Methods and Methodologies in Education*, pp. 165-169, London: SAGE Publications Ltd.

Bem, S., (1981) 'Gender schema theory: a cognitive account of sex typing', *Psychological Review*, Volume 88, Number 4, pp. 354-364.

Bem, S., (1983), 'Gender schema theory and its implications for child development: Raising gender-aschematic children in a gender-schematic society', *Signs*, Volume 8, pp. 598-616.

Berenbaum, S., Martin C., and Ruble, D., (2008) 'Gender Development' in Damon, W. and Lerner, R., (Eds.), *Advanced Child and Adolescent Development*, pp. 647-696, New York: Wiley.

Biesta, G., (2012), 'Mixed methods', in Arthur, J., Waring, M., Coe, R. and Hedges, L., (Editors), *Research Methods and Methodologies in Education*, pp. 147-152, London: SAGE Publications Ltd.

British Educational Research Association (2011), *Ethical Guidelines for Educational Research*, [Online], available at: https://www.bera.ac.uk/wp-content/uploads/2014/02/BERA-Ethical-Guidelines-2011.pdf, (accessed: 12th December 2016).

Burton, N., Brundrett, M. and Jones, M., (2008), *Doing Your Education Research Project,* London: SAGE Publications Ltd.

Busy, K. and Bandura, A., (1999), 'Social cognitive theory of gender development and differentiation' *Psychological Review*, Volume 106, Number 4, pp. 676-713.

Cohen, L., Manion, L. and Morrison, K., (2000), *Research Methods in Education,* (5th Edition), London: Routledge Falmer.

Coyne, S., Linder, J., Rasmussen, E., Nelson, D. and Birbeck, V., (2016), 'Pretty as a princess: Longitudinal effects of engagement with Disney princesses on gender stereotypes, body esteem, and prosocial behaviour in children', *Child Development*, Volume 87, Number 6, pp. 1909-1925.

Demetriou, H., (2013), 'The Case Study' in Wilson, E., (Editor), *School-based Research: A guide for education students'*, (2nd Edition), pp. 256-269, London: SAGE Publications Ltd.

Ehrenreich, B., (2007) 'Bonfire of the Disney Princesses', *The Nation*, Available at: https://www.thenation.com/article/bonfire-disney-princesses/ (Accessed: 12th October 2016).

Evans, M., (2013), 'Reliability and Validity in Qualitative Research by Teacher Researchers' in Wilson, E., (Editor), *School-based Research: A guide for education students'*, (2nd Edition), 143-156, London: SAGE Publications Ltd.

Gerig, A., Taylor, J. and MacKay, T., (2013), *Doing Research with Children: A Practical Guide*, (3rd Edition), London: SAGE Publications Ltd.

Header, A. and Kessels, U., (2015), 'Do teachers equate male and masculine with lower academic engagement? How students' gender enactment triggers gender stereotypes at school', *Social Psychology of Education*, Volume 18 pp. 467-485.

Heller, K., Finsterwald, M., and Ziegler, A., (2010) 'Implicit theories of mathematics and physics teachers on gender-specific giftedness and motivation' in Heller, K., (Ed.) *Munich Studies of Giftedness*, pp.239-252, Berlin: LIT.

Hilliard, L. and Liben, L., (2010), 'Different levels of gender salience in preschool classrooms: effects on children's gender attitudes and intergroup bias', *Child Development*, Vol (81), Number (6) pp. 1787-1796.

Hintermann, C., Markom, C., Üllen, S. and Weinhäupl, H., (2014) 'Debating migration in textbooks and classrooms in Austria', *Journal of Educational Media, Memory and Society*, Volume 6, pp. 79-106.

Karniol, R., (2011) 'The colour of children's gender stereotypes', *Sex Roles*, Volume 68, pp. 119-132.

Keefe, N., Marshall, N. and Robeson, W., (2003) 'Gender equity in early childhood education' in Copple, C., (Ed.) *A World of Difference*, (pp. 109-112), Washington DC: National Association for the Education of Young Children.

Kimmel, M., (2004), *The Gendered Society*, New York: Oxford university Press.

Kohlberg, L., (1966), 'A cognitive-developmental analysis of children's -role concepts and attitudes' in Maccoby, E., (Ed.) *The Development of Sex Differences*, pp. 82-173, Stanford: Stanford University Press.

Kollmayer, M., Schooner, B. and Spiel, S., (2016) 'Gender stereotypes in education: Development, consequences, and interventions', *European Journal of Developmental Psychology*.

Lawson, M. and Philpott, C., (2008), 'Reliability and Validity' in Elton-Chalcraft, S., Hansen, A. and Twiselton, S., (Editors), *Doing Classroom Research: A step-by-step guide for student teachers*, pp. 70-81, Berkshire: Open University Press.

Leman, P. and Tenenbaum, H., (2011) 'Practicing gender: children's relationships and the development of gendered behaviour and beliefs', *British Journal of Psychology*, Volume 29, pp. 52-157.

Lichtman, M., (2006), *Qualitative Research in Education: A User's Guide*, Thousand Oaks: SAGE.

Martin, C. and Ruble, D., (2004) 'Children's search for gender cues: cognitive perspectives on gender development', *Current Directions in Psychological Science*, Volume 13, Number 2, pp. 67-70.

Martin, C. and Ruble, D., (2009) 'Patterns of gender development', *Annual Review of Psychology*, Volume 61, pp. 353-381.

Mears, C., (2012), 'In-depth Interviews', in in Arthur, J., Waring, M., Coe, R. and Hedges, L., (Editors), *Research Methods and Methodologies in Education*, pp. 170-176, London: SAGE Publications Ltd.

Morrissey, C., (1987), 'The two-sentence format as an interviewing technique in oral history fieldwork', *Oral History Review*, 15, pp. 43-53.

Murnen, A., Greenfield, C., Younger, A. and Boyd, H., (2016), 'Boys Act and Girls Appear: A content analysis of gender stereotypes associated with characters in Children's popular culture', *Sex Roles*, Volume 74, pp. 78-91.

Ofsted, (2011), [*Focus school*] *Inspection Report*, [Online], available at: https://reports.ofsted.gov.uk/inspection-reports/find-inspection-report/provider/ELS, (accesed: 11th December 2016).

Ornstein, P., (2011) *Cinderella Ate My Daughter*, New York: Harper Collins.

Peterson, S. and Lach, M., (1990), 'Gender stereotypes in children's books: their prevalence and influence on cognitive and affective development', *Gender and Education*, Volume 2, Number 2, pp. 185-197.

Piaget, J., (1961) *The Child's Conception of Number*, New York: Norton

Roberts, D. and Copping, A., (2008), 'Doing Research in the Classroom', in Elton-Chalcraft, S., Hansen, A. and Twiselton, S., (Editors), *Doing Classroom Research: A step-by-step guide for student teachers*, pp. 85-98, Berkshire: Open University Press.

Schrof, J., (1993) *Feminism's Daughters: Their Agenda Is a Cultural Sea Change*, U.S. News & World Report (I need to check this is referenced properly)

Scott, J., (2008), 'Children as Respondents', in Christensen, P. and Jonny, A., (Editors), *Research with Children: Perspectives and Practices*, (2nd Edition), pp. 87-108, Oxon: Routledge.

Taber, K., (2013), *Classroom-based Research and Evidence-based Practice: An Introduction'*, (2nd Edition), London: SAGE Publications Ltd.

Vygotsky, L., (1961) 'The development of scientific concepts in childhood', in Paciorek, K. and Munro, J., (Eds.) *Sources: Notable Selections in Early Childhood Education*, pp. 11-18, Gudford, CT: Dushkin/McGraw-Hill.

Warwick, P. and Chaplain, R., (2013), 'Research With younger Children: Issues and Approaches', in Wilson, E., (Editor), *School-based Research: A guide for education students'*, (2nd Edition), 59-76, London: SAGE Publications Ltd.

Wellington, J. and Szczerbinski, M., (2007), *Research Methods for the Social Sciences*, London: Continuum.

Wilbourne, M. and Kee, D., (2010) 'Henry the nurse is a doctor too: Implicitly examining children's stereotypes for male and female occupational roles', *Sex Roles*, Volume 62, pp. 670-683.

Winterbottom, M., (2013), 'Taking a Quantitative Approach' in Wilson, E., (Editor), *School-based Research: A guide for education students'*, (2nd Edition), pp. 171-188, London: SAGE Publications Ltd.

Woodhead, M. and Faulkner, D., (2008), 'Subjects, Objects or Participants? Dilemmas of Psychological Research with Children', in Christensen, P. and Jonny, A., (Editors), *Research with Children: Perspectives and Practices*, (2nd Edition), Oxon: Routledge.

Yin, R., (2008), *Case Study Research: Design and Methods*, (4th Edition), London: SAGE Limited, [Online], available at: https://books.google.co.uk/books?id=FzawIAdilHkC&pg=PA24&source=gbs _toc_r&cad=3#v=onepage&q&f=false, (accessed: 12th December 2016).

Zaman, A., (2007) 'Gender-sensitive teaching: A reflective approach for early childhood education teacher training programs', *American Association of Colleges for Teacher Education*, Volume 129, Number 1, pp. 110-118.